XII. The authorship and first publication of the "Jurinean" Genera of Hymenoptera: Being a reprint of a long-lost work by Panzer, with a translation into English, an Introduction, and Bibliographical and Critical notes. By the Rev. F. D. MORICE, M.A., and JNO. HARTLEY DURRANT.

[Read December 3rd, 1913.]

This paper deals with a problem, which must first be solved, before any attempt to fix the Generic Nomenclature of Hymenoptera according to the principle of "Priority" can be accepted as final. The problem is simply this—when were a number of Genera accredited by some authorities to Panzer, and by others to Jurine, first technically "published", and who was their real "author"?

We believe that a complete answer to both questions is supplied by a long-forgotten Article, which is here reproduced by photographic processes from the only copy of it whose existence we have been able to discover. This Article was published at Erlangen in May 1801, and contains inter alia a Synoptic List of the Panzer-Jurine Genera in which they are compared with the Genera adopted by Fabricius in Ent. Syst. Vol. 2 (1793) and its Supplementum (1798). We shall refer to this Synopsis in future as the "Erlangen List," and give reasons why Jurine is to be considered the author of any Generic Name made valid by it.

This Article appeared anonymously in two instalments in a weekly publication. But in a footnote on p. 7 of Krit. Rev. (1806) Panzer acknowledges himself to have been its author, and his statement is entirely borne out by internal evidence contained in the Article itself. This, however does not apply to the Synoptic List above mentioned. What Panzer claims in Krit. Rev., and what he manifestly has a right to claim, is not the first publication of any Names at all (!) but to have explained in this Article the method first devised by Jurine for classifying Hymenoptera, viz. the so-called "alary system" adopted in Jurine's Nouvelle Méthode (a work first announced for publication in 1799, submitted to Panzer for inspection at some time previous to May 1801, and ultimately published at Geneva in 1807).

The present writers were led to make the investigations which have enabled them to republish these long-forgotten documents as follows—

They were in correspondence as to the probable correctness or otherwise of certain conclusions arrived at by Mr. Rohwer in his recent publications dealing with the Genotypes of Sawilies, and had arrived, by different lines of argument, at the same result : viz. that while Mr. Rohwer's conclusions generally seemed to follow logically from his premisses, certain of those premisses had been arrived at without examination of all available evidence, and had therefore been accepted

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somewhat prematurely. Conspicuously this appeared to them to be the case with Mr. Rohwer's treatment of the "Jurinean" Genera. For various reasons they felt convinced that there was some mystery involved here, and that Mr. Rohwer had not succeeded in getting to the bottom of it. And it suddenly struck them both simultaneously (their letters on the subject actually crossing each other in the Post !) that the mystery might possibly be solved by ascertaining what exactly it was that Panzer had said in the Articles alluded to by him on p. 7 of Krit. Rev. Vol. 2. They determined therefore, if possible, to search out and examine those Articles.

For a long time, however, it seemed that this search was doomed to failure, and that the Articles had disappeared beyond hope of recovery. Enquiry was made after them in all possible quarters, but not a trace of them could anywhere be found. At last, on a happy suggestion of Dr. K. Jordan, application was made to the authorities of the University at Erlangen; and, through the most kind and courteous assistance of Oberbibliothekar Dr. Heiland, it was ascertained that a copy of the Erlangen Litteratur-Zeitung for 1801, containing the Articles in question, still existed in the Library of the University. It was too rare (perhaps even unique?) to be sent abroad for any purpose whatever; but we were most kindly provided with photographs (paper negatives) of the documents themselves, and from these negatives Messrs. André and Sleigh have made "blocks" from which our facsimile reproductions are now being printed. It has unfortunately been necessary to cut up the blocks, and thereby somewhat alter the appearance of the Articles, which were printed originally in 4to with double columns (in the style of the Isis, Societas Entomologica, etc.). Such an arrangement could only have been employed in the Pages of these Transactions, by making our reproductions copies on so reduced a scale of the negatives sent to us, that for any practical purpose they would have been almost, if not absolutely, useless. Except as above, we have tried to lay before our readers not only the substance but the actual form of the original publication. As a preliminary to this we have thought it may be worth while to put together a few notes—as follows—on the period in which Panzer and Jurine flourished, and the circumstances under which their chief works were produced.

THE Year of Grace 1793 was politically and socially one of the most eventful in European history. Nine of its months fall within Year I of the French Republican Calendar. It began with the trial and execution of Louis XVI (in January), and ended with the hideous massacres, etc., at Nantes (in December). It witnessed the first appearance in actual warfare of Napoleon Bonaparte, and the assumption of practical Dictatorship by Robespierre; also the guillotining of Marie Antoinette, Madame Roland, Charlotte Corday, and Philippe Égalité; the fall of the Girondins; the establishment of the "Reign of Terror"; the overthrow of the French Church and the deifying of Reason, etc., etc. In this year also commenced the long series of duels between France and Monarchical Europe,

in which Republics, Kingdoms and even Empires rose and perished, and the very foundations of the world seemed to be breaking up.

Yet amid all this distress of nations and perplexity, a more peaceful revolution-or rather evolution-quietly pursued its course. The scientific movement which we associate with the name of Linné was spreading and progressing in a manner which, considering the unrest and preoccupation in other matters of educated Europe in that age, cannot but seem to us surprising. Simultaneously Kirby in England, Lamarck and Latreille in Paris, Jurine in Switzerland, Klug in Germany, Fabricius in Denmark, Schrank in Austria, Rossi in Italy, and many other able men, continued to devote their best abilities to one and the same object, viz. a revised classification of the Linnean "Classis" Insecta. Many of these men had nothing else in common. Schrank was a Jesuit; Kirby a country clergyman; Lamarck and Latreille called themselves (perforce or voluntarily) "Citoyens," and worked under the aegis of the French Republic. Yet all considered themselves colleagues, and disciples of one master, the incomparable Linné (ob. 1778).

The present paper proposes inter alia to consider how certain of these men handled respectively one particular Ordo of the Linnean Insecta, viz. the Hymenoptera. These at that date had been divided into twenty genera, one of which was Apis. About a century later, the late E. Saunders was able to publish a list, from Britain alone, of twenty-eight genera, universally recognised as distinct, which in 1793 were still all included in the single genus Apis.

It was in this year (1793) that there appeared at Nuremberg, with a Preface dated the 21st of August, twelve sets of coloured figures with short diagnoses of German insects. Each figure, and each description, was on a separate sheet, and the sheets were not bound together, but packed in a sort of wrapper or envelope of coloured paper, bearing the date of its publication and a list of the insects figured therein. Corresponding titles were engraved on the plates, and printed as headings to the descriptions. This was the first instalment of a highly successful serial publication, which (with occasional intervals of suspension for a year or more at a time) continued to appear till 1813, certainly, and perhaps a little longer, under the direction of its first

editor, Dr. G. W. F. Panzer. Afterwards (at Regensburg) the work was continued by another editor; and it was finished, or left unfinished, about 1844. At present we are concerned only with Panzer's share in this work; and have nothing to say about its continuation in a later generation.

We purposely did not include Panzer among the systematists enumerated in a former paragraph, because his work was in no sense intended to be a contribution to systematics, but, simply, as an assistance to collectors in naming their insects according to the system adopted (at the time of his publication) by one particular authorviz. Fabricius, whom-to put the matter shortly-he treated as infallible. The title he gave to his work, which we shall cite hereafter as Fn. Ins. Germ., was Faunae Insectorum Germaniae Initia-it was a book for beginners, and dealt only with one local Fauna. He publishes as "new" many species; but he neither characterises, nor intends to introduce as new to science, a single genus-at any rate when dealing with Hymenoptera. His own speciality, so far as he had one, was the *Coleoptera*; and he does not seem to have taken any considerable interest in Hymenoptera till some years after he commenced publication of Fn. Ins. Germ. Nor did he even attempt to make any contribution of his own to the systematics of that Order till 1806 (in a work to which we shall presently refer). It may be taken, therefore, that if, according to any of our present Codes, the mention of a generic name by Panzer in Fn. Ins. Germ. before 1806 makes Panzer its "author," he was its author, not by intention but malgré lui !

Whatever, from a modern point of view, may be thought as to the scientific or artistic merits of Panzer's Figures and descriptions, their publication undoubtedly gave a great stimulus to work on the *Hymenoptera*, and also, as we imagine, on other Orders, not in Germany only, but also in France and England, and this influence lasted as long as the publication itself continued. It is constantly quoted as evidence for the identification of particular species by such authors as—to take a few names at random —Kirby, Stephens, Shuckard, F. Smith in England; Latreille, Lepeletier de Saint Fargeau, Lucas in France; Klug, Taschenberg, and many others in Germany. And even now, it is occasionally necessary to consult it for the above purpose; though, for any other, it is practically obsolete. But it was never intended, nor thought to

be intended, as a contribution to the systematics of *Hymenoptera*.

Consultation of Panzer's Fn. Ins. Germ. is attended by several difficulties : (a) the plates are arranged in no order one may represent a Bee, the next a Spider, the next a Bectle, etc.; (b) they were published with no Index, nor even List of Species for the whole work, only with a list on each envelope of the species figured in it; (c) the generic names used by Panzer are often no longer used in Panzer's sense, and he sometimes gives the same insect one name in an earlier fascicule (Heft) and another in a later; (d) the date of any particular Figure or diagnosis can seldom be ascertained without examining the wrapper which contained it, and not always then-besides, bound copies of the work often do not include these wrappers. Many of these difficulties may be to a large extent overcome by using the excellent Index published by the late E. Saunders, F.R.S. (Gurney and Jackson, London, 1888), to which the present writers desire to own their great obligation. But even this Index does not help us as to Panzer's obsolete and varying use of certain names: e. q. a Hymenopterist would suppose that Macrocera lutea cited in Saunders's Index must be a Bee, but it is in fact a *Dipteron* ! And many of the species listed in the Index under Tiphia would not have been referred by Saunders himself to that Genus: one is a Bee, another some small parasitic species akin to the Proctotrupids, etc., another a Fossorial-wasp which Saunders would have called Astata boops. The addition to the Index of Saunders's own identification of each Panzerian species would have made the work not only invaluable, but almost unimprovable !

The particular authority invoked by Panzer to settle all questions as to the proper naming of Genera was (at any rate up to, and including, 1801) Vol. 2 of Fabricius's *Entomologia Systematica*, 1793; a *Supplement* to this work appeared in 1798, and thereafter Panzer follows the Supplement also. (N.B. *Entomologia Systematica* must not be confounded with the earlier *Systema Entomologiae* of the same author, 1775, though it *is*, more or less, a recasting of it !) The *Ent. Syst.* was a very ambitious work, and intended not merely as a contribution to, but as a settlement of, the systematics of all *Insecta* from all parts of the world. Some of the Generic Names in it appear

there for the first time; others are repeated from the author's earlier works, and of these some were not first proposed by Fabricius, but by Linné. All these, however, when cited by Panzer, are accredited to Fabricius; and when writing of them collectively, he calls them the "Fabrician Genera" [Fabriciussche in 1801, Fabriziussche (sic) in 1806 !]. Every single Generic Name adopted for a Hymenopteron in Fn. Ent. Germ. up to 1799 is taken straight from Ent. Syst. or its Supplement, and is used, or meant to be used, exactly in the Fabrician sense.

But, about 1799, Panzer began to fall under a new influence, tending in a measure to draw him away from his former absolute dependence on Fabricius. He was getting into more and more frequent and intimate correspondence with an incomparably better Hymenopterist than Fabricius; with a man, in fact, who was the first real specialist on that Order; and who already, after many years' study of the subject, had practically completed an independent and highly original revision of the Order, relying especially on a character which Fabricius had left unnoticed, viz. the differences in "neuration" of their wings.

This new friend of Panzer's lived in 1799 at Bern; but soon after he removed to Geneva, where he became a Professor in its University, and there—but not till 1807 published, in its final form, the magnificent work, which he had practically completed, and even announced for publication, in 1799. (*Cf. Jurine, Nouvelle Méthode*, 1807, p. 13, foot-note.)

Jurine's Nouvelle Méthode, as it appeared in 1807, was (1) incomparably the most beautifully illustrated work dealing with Hymenoplera in existence, (2) a work introducing several entirely original characterisations of Genera. many of which remain to this day as foundations on which all systematists in dealing with this Order mainly build. But its real importance in entomological literature depends on neither of the above facts, but rather upon this—It ousted altogether (not at once, but within a very few years after its publication!) Fabricius and his "Systema" from the supremacy they had held so long. [Fabricius died in 1808, it is said from grief at the British bombardment of Copenhagen in 1807.] A new "Systema" had appeared, which on the whole may be said to have held the field ever since; though some of our best

Hymenopterists have succeeded in seeing for themselves and convincing others that the *neuration-characters* must no more be made an idol than the *instrumenta cibaria* of Fabricius, and that neither Fabricius nor Jurine can claim to have shown us once for all the infallible "characteres essentiales," by which Nature has *branded* or ticketed all living creatures in order that Man may be able to distinguish them! This is what the pre-Darwinian entomologists really meant by a "character," and the notion which still exists that there is some *essential* difference between "generic" and "non-generic" characters, "structural" characters and "colour" characters, "specific" characters and "varietal" characters, etc., etc., is really not very different.

But though we now talk of Jurine's invention as a *System*—the "Alary System" and so forth—neither Jurine himself nor his contemporaries ever called it so. It was invariably called—not a System, but a Method. What is the difference? It seems to be this.

A System, or rather The System, is the actual grouping of existences which makes up the Universe. There can obviously be only one such System, and this Linné had called the "Systema Naturae," never claiming for a moment that he had made it or devised it, but only that he had *discovered* it. But a *Method* $(\mu \epsilon \theta o \delta o \varsigma)$ is something much humbler. It is simply a "way-towards" some desired goal. What Jurine claimed was simply this, to have devised a new manner of getting to the heart of things; -an easier, more rapid method, than that of Fabriciusbut nothing more. This will have to be remembered, if we try to understand how it was possible for Panzer to think that Jurine's "Method" might be accepted without abandoning the only possible or conceivable "Systema," which "systema" to him meant simply-the Fabrician conception of an Animal Kingdom based on certain essential differences between Animals which Nature had indicated by fashioning their " instrumenta cibaria " differently. Believing this, and that such characters were the only really infallible and "natural" characters, Panzer could, and did, hold also, that animals might likewise have other characters, not in the strict sense "natural," but (as a matter of fact) so frequently accompanying the "natural" characters, that the presence of such and such an "artificial" character might give us a useful hint what the natural characters

of an animal possessing such an artificial character were likely to be.

One of the great merits which Panzer found in Jurine's wing-characters was just this—that they seemed to run more or less parallel with the Fabrician mouth-characters, and, in so far as they did so, to be approximately, even if not really, "natural." And Jurine himself either did not wish, or did not dare, openly to reject the claim made for the Fabrician characters that they were "natural." On the contrary, by figuring *mandibles* and antennae, as well as wings, in his Plates, he managed, very prudently. if it was done intentionally, to give the impression that, far from attacking the Fabrician characters, he was reinforcing them. And honest Panzer was only too willing to look at things in so satisfactory a light !

It is interesting to trace—for which purpose see Appendix A following this Introduction—the steps by which Panzer's confidence in Jurine is seen gradually ripening.

(a) First in 1799 we find Panzer telling the world through his Fn. Ins. Germ. that one Mr. Jurine of Bern was a very acute entomologist, who had got some "method" of his own for determining insects by their wings, who had sent him (Panzer) such and such insects, given him particulars of their "habitats," and was kindly going to give him more in future.

(b) Then in 1800, a year when the French and Austrians were cannonading each other under the walls of Nuremberg, Panzer publishes no instalment of the Fn. Ins. Germ. but waits for quieter times, and probably finds leisure to go more carefully into the "Proofs" and "Figures" of Jurine's forthcoming book, advertised last year, but not yet out.

(c) By May 1801 he had become convinced that this Nouvelle Méthode is an excellent idea, very convenient, and perfectly orthodox. He will give it a start, but in a quiet way, taking no responsibility for anything. So he gives it a favourable notice, not at Nuremberg (where his authorship would be recognised at once) but at Erlangen, where a new Zeitung in which he had some sort of interest was being started. The thing would make good "copy" for an Editorial; and he could do his friend a good turn without bringing his own name in at all, or making the readers of Fn. Ins. Germ. wonder if they were wanted to rename all their specimens. So he leaves his Articles

unsigned, and takes care to describe himself vaguely as "a German naturalist," whereas he gives the greatest possible prominence to the name of Jurine, and pays him the highest compliment he can by representing him as an able new aide-de-camp of the illustrious Fabricius.

Then once more he brings out a new instalment of Fn. Ins. Germ. containing several Figures contributed by and attributed to Jurine; mentions him repeatedly as authority for habitats, etc.; figures certain Jurinean species with Jurine's name attached, and even slips in a few Generic Jurinean names (once at least quite erroneously) in his Synonymy, while retaining Fabrician names on the corresponding Plates. He does not call these Jurinean Genera "inedit" (by which formula he denotes in all his works unpublished names of genera or species), because they had already been published at Erlangen !

(d) Three years pass during which the Fn. Ins. Germ. is again suspended. In the last of them Fabricius brings out (1804) his *Piezatorum*. Panzer girds himself again and brings out (1805) a new instalment of Fn. Ins. Germ., at last using Jurinean names quite freely, even on the Plates, sometimes even where other names were employed for the same Genera in the Piezatorum. We suspect that this was accidental. Fabricius himself had introduced certain Jurinean Generic names into the *Piezatorum*, and Panzer may not have realised that he had rejected others, and thought that the new nomenclature as a whole had received Fabricius's imprimatur. [Or perhaps the Plates were engraved before the *Piezatorum* reached Panzer, and it was too late to alter them; even as Jurine had to explain in Nouvelle Méthode (1807) that he was obliged to leave certain names on the Plates, simply because the latter had been engraved long ago and could not now be altered.]

(e) Next year (1806) again no Fn. Ins. Germ., but instead of it Panzer's first serious attempt to grasp and compare the nomenclature of Jurine and Fabricius (the latter as amended in the *Piezatorum*). This took the form of two small Volumes printed in Nuremberg, and entitled *Kritische Revision der Insektenfauna Deutschlands*—suggesting that it was meant *inter alia* as a sort of Guide-book to accompany the Plates, etc., of Fn. Ins. Germ. This title sufficiently describes its first Volume, which deals with *Coleoptera*. But Vol. 2 is devoted to *Hymenoptera*, and this Volume has an alternative title, which shows that Panzer had more

in his mind than a simple revision of his past work. The alternative title is as follows—

ENTOMOLOGISCHER VERSUCH

DIE

JÜRINESCHEN GATTUNGEN

DER

LINNÉSCHEN HYMENOPTERN

NACH DEM

FABRIZIUSSCHEN SYSTEM

ZU PRÜFEN: etc.

This is followed by a sort of Essay, written exactly in the style of the Erlangen Articles, and evidently a composition of the same writer. Like those Articles it maintains the thesis that the Jurinean Genera, far from upsetting the Fabrician system, really support it. Jurine's characters are excellent and practically most useful. They are easy to see and to distinguish. They indicate just the same divisions which Fabricius has discovered and Nature established in the Animal Kingdom. Really and essentially Animals are separated, and ought to be distinguished, by the differences in their mouth-parts, the instrumenta cibaria. This is the high-road to Truth, and Fabricius has shown it to us. But the high-road is long and sometimes rugged and difficult. We may shorten it, and make it easier, if we can, by taking side-paths and short-cuts, provided that we come back ultimately to the high-road, and own (even while we stray from it) that it is the one and only "Natural" method of approaching the Truth. Jurine's Method is such a short-cut. It is not the high-road itself, but it runs parallel with it, leads to the same goal, and is easier to follow. Therefore Jurine's "method" is lawful, as long as it does not lead us to abandon the Fabrician "system"; and that it in fact does not do so, is one of its principal merits.

(The above is not a translation, nor even a condensation

of Panzer's actual language, but we believe it represents fairly the thesis which he is maintaining.)

This Essay, then, to which the secondary Title really refers, is a sort of Apologia—minimising the differences between Jurinean and Fabrician methods, and showing that no one need feel any scruple or difficulty in using the former, so long as he retains his belief in the essential "naturalness" of the latter.

The rest of the book is mainly occupied with classifying the *Hymenoptera* previously figured and described by Panzer without order in the Plates of Fn. Ins. Germ. It only professes, as did the *Fauna* itself, to deal with German species. These are now arranged under Fabrician Generic names for the most part, but now and then with a Jurinean Genus upheld as a convenient receptacle for species which it was difficult to bring under Fabrician categories, or mentioned as synonymous with some section of a Genus, indicated by Fabricius, but not yet provided by him with a name of its own.

The Fabrician Genera of Krit. Rev. are, however, no longer taken solely from Ent. Syst. Fabricius in 1804 had revised his own classification and nomenclature in a new work dealing with Hymenoptera only, the Systema Piezatorum. It is this revised list of Genera which Panzer now adopts, and it is into these revised Fabrician Genera that he tries as far as possible to fit the species known to him, and often figured and described by him in the past under names which Fabricius once used but has now abandoned. In short the Syst. Piez. 1804 is to the Krit. Rev. 1806 exactly what Ent. Syst. 2. 1792 was to Fn. Ins. Germ. 1793-1798, the source of its nomenclature. and the ultimate authority to which all enquirers are to be referred. There is, however, this difference in the situation-that Panzer has now undertaken not only to cite Generic names, but to distinguish Genera. And he has also a more difficult task before him than in 1793-8: (a) because he has to reconsider a previous nomenclature to which he had committed and accustomed himself, part of which is to be retained, and part abandoned; to do which he must ascertain for himself what Fabricius's recent changes in his nomenclature really amount to; (b) because he now recognises that some of the Jurinean Genera deserve names of their own, with which Fabricius apparently has not provided them; (c) because in the Fn, Ins. Germ. of the preceding year, probably having then not thoroughly assimilated the substance of Fabricius's new proposals, he had done his best to popularise at least one Jurinean Generic name, for which Fabricius was now proposing another; (d) because Jurine was a friend whom he admired, to whom he was under great obligations, which he had tried to repay by doing all that he could to get Jurine's views a hearing from the "entomological public"; and he naturally did not wish to withdraw from his support of Jurine, if he could support him without rebelling against Fabricius.

It would require a very long and minute examination of the Krit. Rev. Vol. 2 to discover exactly how far Panzer succeeds in reconciling these conflicting motives, and carrying out the complicated programme which he has set himself, in this, his first attempt to come before the public in the character of a systematist.

It may be said, however, at once, that the *Revision* is a book in which it is often difficult to realise what are the author's own views, or whether he has any view of his own at all, on the merits of the nomenclature which he is discussing. The book is made also very puzzling by the author's eccentric way of quoting synonyms. First, in capitals, he gives the names which are to be sunk, and afterwards, in small italics, those which he intends to be adopted—thus exactly reversing the usual habit of authors ! As a sort of Key to the scattered Figures, etc., of Fn. Ins. Germ. and a definition-such as it is-of the Fabrician, and a few of the Jurinean Genera, the book was probably more or less helpful to the German collectors for whom the Fn. Ins. Germ. had been intended. But it contributes absolutely nothing that can be called original to the systematics of its subject. At that we may leave it, adding only (if anything need be added) that the book is printed and generally "got up" in a very odd and as it were amateurish style, which reminds us that it appeared when the publishing and printing trade at Nuremberg was being conducted under disturbing circumstances, for it was in this same year that Napoleon was terrorising the Nuremberg booksellers, shooting one (Palm), and driving others to hide themselves, because a pamphlet had appeared there, of which he disapproved.

Although we may be blamed for importing into a question of entomological nomenclature so much of matter which may be thought extraneous and inadmissible as "not

evidence," we will venture a little further in that direction. and glance for a moment at the state of things in Switzerland, when Jurine, instead of publishing at Bern when his work was "actually in the press," transferred himself from Bern to Geneva and took his proofs with him. This we now know occurred between Aug. 1799 and May 1801. Consulting an Encyclopedia we come across a passage stating that "from 1799 to 1801 Switzerland was the theatre of the wars between the French, Russians, and Austrians." We find too that Geneva had been annexed by France in 1798, and that in 1801 the Peace of Amiens and the First Consulate of Napoleon filled mankind with hopes (which however were soon to be disappointed) that a new era of peace and prosperity had set in for all Europe, and more especially for France, now at the height of her greatness. Geneva, then, in 1801 seemed likely to be a desirable residence for a student and an author in prospect. Bern, on the contrary, was still in trouble politically; the French had upset its old government in 1798, and affairs there were still in chaos, till Napoleon finished what he called his "Mediation" of Switzerland in 1802. May we not conjecture from this, why it was that Jurine left Bern at this particular time, and why he did not publish there? Further, when arrived at Geneva, he would naturally not set about publishing at once. He had other things to think of, a new career to be taken up, new surroundings in which he had to "find his feet." Also he had now a new collecting ground; and in fact he tells us in the Nouvelle Méthode that he would have published sooner, if he had not formed exaggerated hopes of increasing his list of new Genera!

We have now seen how, when, and where the Jurinean Genera were first published: viz. as part of an Article, the rest of which was certainly written by Panzer, but for which he was careful to incur no responsibility till 1804 and throughout which he expressly and consistently called the Genera Jurinean (*Jurinesche*!) and brought Jurine's name to the front on every possible occasion; we know also now that these names date from May 30, 1801, and that they were published in a Journal which was purchasable by all men at Erlangen.

If we next proceed to compare the Erlangen List with the contents of the *Nouvelle Méthode* as finally published, we find that exactly the same Genera, numbered and arranged similarly, and applied to the same groups of species occur in both publications with these differences : (1) One Genus has changed its name between the two publications and Jurine mentions that he has made this change, and says that he has done so deliberately. (2) Many species are added in the Geneva List to those mentioned in the Erlangen List. (3) Several new Genera are introduced in the Geneva List, and these Genera are not numbered at all, because, as Jurine explains to us, he was not acquainted with them when he had completed the body of his work and had also had his original Plates engraved. These therefore were supplementary—added to the work since 1800 when Panzer saw it.

We think these facts clearly indicate that though the Erlangen Articles were written by Panzer, the authorship of the List should be accredited to Jurine; and we have ourselves no doubt whatever, that the actual List was received by Panzer from Jurine, and that round it—so to speak—he wrote the Articles.

In support of our contention, we quote this Rule of the Zological Congress (Berlin 1901, p. 951) :---

—" S'il ressort clairement de la publication que ce " [*i. e.* celui qui l'a publié] " n'est pas l'auteur de celle-ci, mais bien un autre auteur qui est le créateur du nom et de la définition ou description, ce dernier doit être consideré comme l'auteur légitime du nom."

This Rule seems to express exactly the view which we venture to take; and we hold accordingly that Jurine and not Panzer is the "author" of all new names in the Erlangen List. They are expressly accredited to him there; and he unquestionably created and defined them himself. Panzer did not, and could not (in 1801) do anything of the kind, his own acquaintance with the characters of *Hymenoptera* being as yet far too superficial. In 1806, we believe, he made his *first* attempt in that direction when he proposed and defined the Genus Osmia.

It may still be asked—Why, then, did Jurine in the *Nouvelle Méthode*, 1807, seem to disclaim his authorship and accredit names of his own to Panzer? But we do not think much of this. Jurine could not foresee our present definitions of publication, authorship, etc., nor the importance now attached to Priority, Validity, etc., etc. After all, Panzer had first passed the Names through the press at Erlangen, and Jurine may have had no particular desire to take credit for them, just as Panzer had felt

no scruple about accrediting Linnean names to Fabricius. Similarly, when in the same work Jurine meets some criticisms on his method (neuration, etc.) made by Klug in 1803 with the retort that he had never published anything at that time "sur ce sujet," we need not consider whether or no he here disclaims authorship of the Genera, for (a) "ce sujet" surely means the neuration-characters, not the names of Genera; (b) it was quite true that the remarks on the merits of these characters in the Erlangen Articles were published by Panzer and not by Jurine; and (c) if, as a fact, and as "authorship" is now defined, Jurine was author of the names, no subsequent disclaimer can affect the situation in any way. If he was the author, he was the author, and no more needs to be said !

It is probable that Panzer was not the only colleague who had a sight of Jurine's work in its earliest form. But of this we have no positive proof. It is clear that Klug knew something about it in 1803; but he says nothing that he might not have learnt from the Erlangen publication in 1801.

Several allusions to Jurinean names are made by Latreille in Paris before the Nouvelle Méthode had appeared, as for instance when he mentions "Astatus dans le sens de Jurine et de Panzer "-the order in which he cites these names suggesting that he accredited the Genus to Jurine rather than to Panzer. So much, however, and also his attributing the name Urocère (meaning Urocerus) to "notre collègue Jurine," may merely indicate that he had seen certain Figures and descriptions in Fn. Ins. Germ., viz. 83.12 (published in 1801) and 85.10 (Astatus on the Plate, Urocerus in the Text), 11, and 12 (published in 1801). But he says, also, and this implies more knowledge of the matter, that "ce savant" (*i.e.* Jurine) "publiera incessament une nouvelle méthode" (*sic*) "sur les hymenoptères, qui ne pourra manquer d'être bien accueilée." And in 1807 (the year when the Nouvelle Méthode at last appeared) Latreille remarks, as he finishes Vol. 3 of his Gen. Crust. Ins., that just as the first part of his own book was going to press he received from his "friend" (ami) Jurine a copy of the magnificent new work just published at Geneva by the latter. (Which should be noted inter alia because it proves that, of these two works published both in 1807-the Nouvelle Méthode and Gen. Crust. Ins. Vol. 3—the former was first published !)

Latreille proceeds to describe the form and contents of Nouvelle Méthode very fully and correctly; does full justice to the splendour of the illustrations, and the general excellence of the work; compares its terminology with his own; and quotes the whole List of Genera as we now find them there. He does not entirely endorse Jurine's views, still insisting that, when all is said, the *instrumenta cibaria* however minute, however difficult, etc., do yet supply the primary characters, but his criticism is very temperate and courteous, and he makes one entirely reasonable objection to Jurine's Ordo III, viz. that it is a very mixed group and requires, to make it satisfactory, much further subdivision. This remark is certainly not unjustified, for the Ordo in question besides Bees, Fossors, Ants, and Wasps, includes likewise the Ichneumonidae and Braconidae, and also Chrysis, Leucospis, and many minute parasitic groups !

And what did Fabricius himself think of the rival who was destined to overthrow him ?

Practically he treated him rather badly. Somehow or other he got knowledge of quite a number of Jurinean names before 1804, in which year he published the Systema Piezatorum. And of these names he ignored some silently, e.g. Bremus, adopting instead Latreille's later name Bombus. Others he calmly appropriated to his own use without acknowledgment, e.g. Prosopis, which he cannot have invented independently since he uses it in the Jurinean sense. Others (the most flagrant case being that of Cryptus) he also appropriates without apology, and commits the unpardonable sin of deliberately creating a homonym! The older Cryptus of Jurine was a Sawfly! The new Cryptus of Fabricius was (and is still) the current name for an Ichneumonid! and this indefensible act of undetected piracy at present vitiates the whole nomenclature of an immense group of modern Genera. And the rest of the acts of Fabricius, and the evil that he did, and the Names that he stole from Jurine, will be discussed in our critical Notes. But at least he did try to make some kind of reparation to his victim by paying to him, in the Preface of Systema Piezatorum, a compliment, which, however grudgingly expressed, shows that Fabricius did not look on his rival as a mere ignorant upstart who had to be brought to his senses by a good shaking, or an obscure nobody whose claims to be an "author" were ridiculous, and who ought to be too thankful that the great Fabricius

should condescend to use his Names at all whether in his own sense or in any other.

This is what Fabricius says, enumerating those authors who had in various ways contributed to the progress of Entomology, and whose works he advises the "Lector Benevolus" to make use of until (as he amiably puts it) others produce better ones.

"Auctores hujus classis numerosi.

" Scientiae heroes systema condunt et characteribus certis bene elaboratis firmant. Linné, Latreille, et forte Jurine."

Then he goes on to enumerate lower orders of workers such as Ichniographi (here including Panzer), Descriptores, Observatores, Monographi, etc. But these do not now concern us. The point to be noted is that Fabricius himself, who of all men must have been most tempted to belittle Jurine, had the grace to acknowledge his rival's architectonic genius, and to rank him even hypothetically on a level with Linné and Latreille.

Appendix A. Jurine and Panzer.

The following Plates, or descriptions, of Fn. Ins. Germ. may be applied to for information as to the relations between Panzer and Jurine in certain years—

1799.	Heft 62.	Plates	6, 7, 8, 10, 13, 14, 18, 19.
1800.	Heft 76.	,,	11, 15, 16, 17, 18, 20.
1801.	Heft 82.	,,	10, 11, 12, 13.
	83.	,,	11, 12, 14.
	84.	,,	11, 12, 13, 20, 21, 22.
1804.	Heft 86.	11	13.
	90.		13.
	00.	3.9	201

besides others which we may have failed to notice. The great falling-off in numbers in the above List after 1801 requires explanation. It was probably due to the publication in 1804 of the *Piezatorum* which recalled Panzer's chief attention to his old master and led, *inter alia*, to the publication of *Krit. Rev.* in 1806.

Appendix B. Jurine and Fabricius.

To judge of the real progress in Classification made by Jurine before 1801 we may notice that—

Fabricius before 1804 had dealt with :---(a) Three (palaearctic) Genera of Jurine's Ordo I, *i. e.* Sawflies; (b) Two of TRANS. ENT. SOC. LOND. 1914.---PARTS III, IV. (FEB.) AA

Jurine's Ordo II, *i. e. Evania*, etc.; (c) *Twenty-four* of Jurine's Ordo III, *i. e.* Aculeates, and Parasitica (except *Evania*, etc.). = 29 in all.

Whereas in 1801 Jurine had named (a) Eleven (palaearctic) Genera of his Ordo I; (b) Four of his Ordo II; (c) Forty-eight of his Ordo III. = 63 in all

-thus more than doubling the palaearctic List of known Genera! [Fabricius, however, had also dealt with many Exotic Genera which were unknown to Jurine.]

Appendix C. Panzer and Fabricius.

The following "Fabrician" names were adopted by Panzer from Ent. Syst. Vol. 2 before the appearance of the Erlangen List and introduced first into Fn. Ins. Germ. at the dates stated.

Andrena, Apis, Bembex, Chrysis, Crabro, Scolia, Tenthredo (1793).

Leucospis, Vespa (1794).

Chalcis, Hylaeus, Nomada (1796).

Ichneumon, Mutilla, Philanthus, Tiphia (1797).

Formica (1798).

Cynips, Eucera, Evania, Mellinus, Sirex, Sphex (1799).

Also from the Supplementum of Ent. Syst.

Banchus, Pompilus (1798).

Till after the appearance of the Erlangen List, Panzer never even alludes to any other Genus of Hymenopteraexcept the above. Nor does he, we believe, intentionally (apart from allusions in his Synonymies) accept and introduce any others into Fn. Ins. Germ. before 1804.

We now reproduce the Article in its original German form, and also the Titles (shewing dates, pagination, etc.) of the two issues of the Zeitung containing it. Three curious slips of the original editor, or printer, will be noticed: viz. (a) both Numbers are headed "N^{ro.} 21" they should be "N^{ro.} 20" and "N^{ro} 21" respectively!; (b) "entomolischen" (sic) is used for "entomologischen" in the heading prefixed to both parts of the article; (c) most perplexing of all, the dates given by the publishers are Saturday May 25th, and Saturday May 30th, 1801, which is obviously absurd. We imagine that the *real* dates were May 23rd, and May 30th, 1801, both of which fell on a Saturday.

- 2 <i>2</i> -	153 Nro. 21. 154
Crains pour Pan	INTELLIGENZBLATT
sudęvilles. Numo.	DER
qui donneur des CPr. 76 e. et 2 fr.	LITTERATUR-ZEITUNG.
efino, foulplure. vans. expoles au ao 8. (Pr. 75 c.)	Erlangen, Sonnabends am 25. May 1801.
tenant une notice ictears, les pièces 30 e. et 2 fr. 25 c.	

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Erl. Litt-Ztg. 1. 160 (23. V. 1801).

V. Vermischte Nachrichten.

Nachricht von einem neuen entomolischen Werke, des Hru. Prof. Jurine in Geneve.

Verschiedene öffentliche Blätter und Zeitschriften, haben schon vorläufige Nachricht von einem für die Entomologie äulserst wichtigen Unternehmen gegeben, dem üch einer der achtungswürdigsten und vörzüglichsten Entomologen, Hr. Prof. Surine in Geneve unterziehen werde. Gegenwärtig kann man diese Nachnicht nicht nur bestatigen, sondern sie auch mit der Anzeige dahin erweitern, das dieses Unternehmen, wirklich seiner Vollendung nabe, das- Wörk selbst unter der Presse ist, und bereits sieben vortresslich gestochene Kupsertafoln, iu med. quarto, von dem Hrn. Vers. einem teutschen Entomologen, als Probe, zur vorläufigen Einsicht überlassen worden find.

Man kann daher das entomologilche Publikum, nut einstweilen, bis das Werk felbst sprechen kaun, etwas näher mit dem Plane dieles Unternehmens bekannt machen, und die Ablicht des *Hrn. Verf.*, den vorliegenden Blättera gemäß, vorläußig detailliren.

Zum Hauptgegenstande seiner entomologischen Beschäftigungen, wählte Hr. Prof. Surine scin Jehren, fast ausschliefslich und mit Voiliebe, diejenige Klasse der Insekten, welche der seel. Archiater von Linne Hymenoptera und Hr. Prof. Fabricius Piezata genannt haben, und klassischrie folche nach einer neuen vorhin nicht angewendeten Methode.

Das Fundament derselben beruht auf den Flügeln der darunter gehörigen Arten, vorzüglich aber, auf den dasehlt bald mehr, bald minder netzartig fich vertheilenden Gefussen, oder den sogenannten Nerven und Adern. Jedoch find die drey Ordnungen. in welche diese Infektenklasse von dem Hrn. Ptof. Jurine subdividirt worden ist, lediglich von dem Sitze und der Anbestung des Unterleibes (Abdomen), an das Brussska (Thorax) hergenommen. nämlich so: Ordo I. Abdomine prorsus selfsti. Ordo II. Abdomine supra thoracem infixo. Ordo III. Abdomine petiolato: petiolo pone thoracem infixo.

Unter diesen drey Ordnungen fichen nun die sämmtlichen Gattungen (Genera) der hicher gehörigen Gall -Schlupf - Blatt - Gold n. s. w. Wespen, der Wald - Blumen-Trauer Bienen, Hummeln, Mutillen, Ameisen n. s. w. Nro. 21.

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INTELLIGENZBLATT

LITTERATUR-ZEITUNG DER

Erlangen, Sonnabends am 30. May 1801.

I. Vermifchte Nachrichten.

Nachricht vom einem neuen entomolijchen Werke, des Hrn. Prof. Jurine in Geneve (Bejchlufs). Die Haupteharaktere (Characterce primar.) der Gatsungen felbft, beruhen zwar vorzüglich und fast ausfchliestich, auf den Gefäsen oder den Nerven und Adern der Flügel, je nach dem jene bald mehr bald minder,

Z.B., fo bestimmt die zwyte Cellula cubitentis mit ihrem Stielgen (petioluta) den vorzäglichen generischen Charakter von Nyfson: die cellulla cubitalis incompleta, den ganz eigenen der Chryfis: fo wie eine eigene lineola fteans der cellula radialis, den Charaktor der Gattung Bremus.

Die II, III, IV und Vte Kupfettafel versinnlicht num diese generischen Charactere, in genau und hinreichend

1801).

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Litt-Ztg. 1.

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Erl. Litt-Ztg. 1. 161 (30. V. 1801).

I. Vermischte Nachrichten.

Nachricht von einem neuen entomolifchen Werke, des Hrn. Prof. Jurine in Geneve (Beschlufs).

Die Hauptcharaktere (Characteres primar.) der Gattungen felbft, beruhen zwar vorzöglich und fast ausschlieslich, auf den Gefälen oder den Nerven und Adern der Flügel, je nach dem jene bald mehr bald minder, durch ihre auaftomolenartigen Verkettungen, und netzförmigen Verbindungen, fich verflochten, und dadurch verschiedentlich geformte Cellen, Geflechte und Netze bilden; indesten, und um diesen ftebenden - durch jene möglichen großen Modifikationen, zur Errichtung natürlicher Generum äufserst pertinenten - Charakter, nicht in eine zwangvolle Einseitigkeit ausarten zu lassen, und zugleich huch die verschiedenen Formen der Fühlkörner (Antennae), fo wie die Kinnladen (Mandibulae), als Characteres secundarii, mit in sublidium genommen worden, doch find die Anastomofen der Flügeladern und Nerven, stets die ersten oder stehenden Characteres der generum.

Indeffen verhält es fich, bey Errichtung der Generum mit diefen Anaftomofen doch fo, dass einige den Charakter der Gattungen bestimmen, andere hingegen, und zwar stets auf dem namlichen Flügel, den Charakter der Arten (Species) angeben.

Jeder Flügel, der unter diese Klasse gehörigen Infekton, wird im Allgemeinen nach seinem Umrisse eingetheilt: in 1) Bass, 2. Apex, und 3, 4) Margines.

Jeder Flögel wird ferner nach feinem Flächeninhalte den die fich durchkreuzenden Gefalo, und daher entstehenden Anastomosen der Nerven, bilden, abgetheilt: 1) in das Punctum, 2) den Rgdium, 3) den Cubitum, 4) die Nervos brachiales, 5) die Cellulas radiales, 6) die Cellulas subitales, und 7) in die Nervos recurrentes. Die 5.6.7. geben indessen nur diejenigen characteres generum "ab, die bey Errichtung der Gattung unentbehrlich find: üe find daher auf Tab. I, der Instruktionstafel, roth gezeichnet, um diesen Charakter sogleich in das Auge falsen.

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Z. B., fo bestimmt die zweyte Cellula enbitatis mit ihrem Stielgen (petiolata) den vorzüglichen generischen Charakter von Nyfson: die cellulla cubitalis incomplata. den ganz eigenen der Chryfis : fo wie eine eigene lineola fesans der cellula radialis, den Charaktor der Gattung Bremus.

Die II, III, IV und Vte Kupfertafel versinnlicht nun diefe generischen Charactere, in genau und hinreichend vergrößsert abgebilderen. Flügeln, fehr deutlich. Die II. IIIte, stellt jede, in 20 viereckigten Fächern, eben fo viele Flügel, oder eben so viele Genera dar; auf jeder der folgenden (IV und V) aber find in 24 etwas kleinern Fåchern, eben fo viele Flagel oder Genera, mit ihrer Nomenklatur, gezeichnet. -Man kann nun, wenn man den Clavem methodi boftimmt gelafst hat, fich fehr leicht zu rechte nuden. Ueber alles aber gehen, um die Kenntpile diefer Methode zu erleichtern, die auf den nachfolgenden Tafeln fiede zu nenn viereckigten Fichern) und zwar, nach den nunachahmlich genauen und fchönen Mahlereyen des Ifrn. Prof. Jurine, von der Meisterhand des Bürgers Maffol, ganz ausgestuchenen Arten, fo dals einem jeden eigenen Genus, auch eine besondere Art gewidmet ift, Nicht nur enthalt demnach, jedes Fach oder Viereck, das ganze Infekt complett, und wenn es nöthig war, auch ansehnlich vergrofsert, fondern auch besonders ein Fühlhorn, öfters auch dieses nach beyden Geschlechtern, fo wie eine Kinnlade unter ftårker Vergroßsorung, nebft dem Namen des abgebildeten Infekts. Auf diesem Weg wird es fast unmoglich fich zu irren, und wenn man bey eigenen Unterfochungen, auch von den nicht vorgestellten, die Gattungerechte auszumitteln lucht, fo wird man, wenn man nur vorher, die Flügeltafeln confuliren will, fich mit Beyhalfe dieler geherischen Tafeln, fo zu rechte finden, dass fodann in der Folge jeder Verirrung ficher ausgewichen werden kann.

Die Gastungen felbft, werden durch die über Erwarten einigen Charaktere der Flügel, Fühlhorner und Kinnladen auferst natürlich; das fcheinbare, gefuchte oder künftliche, hört dann Aufenweile auf künftlich zu feyn, und

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ud man ficht dann nur, die folbst von der Natur, unter eine Firma zulammen goftelhen Arton, die nach fo richtigen Regeln an einander gereihet find, fo dafs es zu verwundern ift, waram man fie der Natur nicht schon früher abgelauschet hat.

Um daher die Freunde diefer Infokten vorläufig felbft mit den, nach diefer Methodis errichtetun Generibus behannt zu machen, fo. werden hier folche nicht aus mitgetheilt, fondern auch den bereits bekannten Fabricinsfchen gegenüber gesiellt, wornach es dean loichte wird, diele Genera des Hrn. Prof. Jurine mit denen des Hrn. Prof. Fabricins zu vergleichen, oder, wenn es angeht, zu combiniren.

Ordo I. Abdomine provius feffit.

Surine.

Fabricins.

Gene 1 Tenthreda Tonthrodo : antennis clavatis Gen. 2 Cryptus Tenthredo : antennis inarticulatis Tenthredo : Scrophul. viridis etc. Gen. 3 Allantus Gen. 4 Dolerns Tenthredo germanica, gonagra etc. Gen. 5 Nemasus Tenthrede caprcao, feptentrional. etc. Gen. 6 Pteronus Tenthredo: antennis pectinatis. Gen. 7 Cephalcia Tenthredo: antennis multiarticul. Gen. 8 Ory //us Oryffus Supplem. Gen. 9 Aftains Sirex pyemaeus. Banchus ipini-12 pes Panzer (Banchus viridator Fabric. inedit.) Sirex Camelus, Dromodarius, Gen. 10 Urocerus Gon. 11 Sirex Sirex Gigas. Ordo II. Abdomine fupra thoracem infize. Gen. 1 Evania Evania appendigafter, minute:

practor utramque mulla. Fornus Supplem.

Gon. 2' Foenus Gen. 3 Aulacus Gen. 4 Stophanus

Ichnowmon ferrator Supplem.

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Ordo III. Abdomine petiolato: petiolo pous thorasem infine

Gen. 1 Ichneumon	Ichneumon.
Gen. 2 Anomalon	Ichneumon.
Gen. 5 Bracon	Ichneumon defertor, denigrator.
Gen. 4 Pompilus	Pompilus Supplem.
	Evanta punctum.
Gen. 5 Spher	Sphex.
Gen. 6 Pfen	Sphex atra.
Gen. 7 Stigmus	
Gen. 8 Apius	Sphex figulus.
Gen. 9 Larra,	Larra.
Gen. 10 Dimorpha	Tiphia abdominalis Panzer.
Gen. 11 Tiphia	Tiphia.
Gen. 12 Scolia	Scolia.
Gen. 13 Sapyga	Scolia Prisma.

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Jurine.	1 Fabricins.
Gen. 14 Myrmofa Gen. 15 Ve/pa Gen. 16 Bembez Gen. 17 Ma/aris Gen. 18 Simblephilus Gen. 19 Mellinus Gen. 20 Arpactus Gen. 21 Alyfon	Hylaeus thoracicus. Vefpa. Bembez. Majaris. Philanthus pictus Panzer. Mellinus ruficornis. Crabro U flavum Hellwig. Mellinus myflaceus, quinquecine- tus. Spher fufcata. Pompilus (pinofus Panzer. Pompilus tumidus
	Panzer.

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Gen. 22 Nyllon

Gen. 23 Philanthus

Gen. 24 Gonius Gen. 25 Mi/cophus Gen. 26 Dinctus Gen. 27 Crabro Gen. 28 Cemonus Gen. 29 Oxybelus

Gen. 30 Profopis

Gen. 31 Nomada Gen. 32 Andrena * Bullae alarum in Nomadis et Andrenis femper reperiuntur in mervis cubitalibus et securrentibus. Gen. 33 Lafius Gen. 34 Crocifa

Gen. 35 Apis Gen. 36 Trashu/a

Gen. 37 Bremus Gen. 38 Musilla Gen. 39 Formisa Gen. 40 Cynips Gen. 41 Chelonus Gen. 42 Chryfis

Gen. 43 Omalus

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Crabro fpinofus: trimaculat. Roff. Mellin. interruptus. Fabr. Pompil. maculatus. Fabr. Philanthus lactus, arenarius. Crabro labiatus Fab.

Crabro pictus, Pompilus guttatus, Crabro. Crabro unicolor Panzer: Crabro lineatus, uniglumis, highs. mis. Sphex annulata, fignata Panzer. Hylaeus annulatus Fab. Mellinus atratus Fab. inedit.

Nomada ruficorais etc. Andrena Succincta, bicolor. Andrena (Nomad. Fabr. inc. dit) lobas Panzer, Nomada gibba Fabr. Andrena mulciform. Roff. (Nomada Nigrita Fabr. inedit.) Apis quadrimaculata Panzer. Apis punctata. Nomada scatellata, Andrena armata Panzer. Apis mellifica : praeter hanc nulla. Apis maculata, bicornis, fusca, Tufa. Apis cornigera. Roff. fronticornis. (Taurus Fabr. inedit.) - Panzer. aterrinia Panzer. Apes bombinatrices. Mutilla. Formica. Cynips. Ophion cultellator. Ichneumon oculator. Chryfis. Ichneumon auratus. ferniauratus.

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Jurine.	9
Gen. 44 Ceraphron	
Gen. 45 Leucopfis	Leucopfi
Gen. 46 Codrus	
Gen. 47 Chalsis	Chalcis. plan Tiphia c
	plai
Gen. 48" Pfilus.	Tiphia c

Cunips armata Panzer. esque Ichneum, minuti. Tiphia cenoptera Panzer.

Fabricius.

Aus voranktehender Parallele bemerkt man leicht, wie ach die Jurineschen Gattungen gegen die Fabriciusschen verhalten; wie fehr fich manche jener, diefen nabern; wie nafürfich auch viele Fabricius sche Gattungen find, die felbst durch die Anwendung diefer neuen Methode nicht verdrängt werden konnten; dals aber auch diese Infektenklaffe durch leistere wieder darum ungemein vieles gewinnen mulste, weil Hr. P. Jurine neben den Flügeln auch auf diejenigen Theile Bedacht nahm, deren Dignität Hr. P. Fabricius bey feiner Klaffifikation mit fo viel Scharffinn beherzigte.

Ein Mehreres noch über Hrn. Prof. Jurine's Unternehmen zu fagen, würde zu fehr die Grenzen einer blofs verläufigen Anzeige überfehreiten. Es fey das bisher Gefagte hinteichend, bis diefes Werk felbft zu Wort kommen kann.

TRANSLATION.

When the translation here following was written, we had not yet decided to reproduce in facsimile more of the original Articles than the tabulation of the Genera; and accordingly more pains were taken than now seem necessary to retain the precise form of the original even in minute details, such as the use of Capitals, and Italics, the varying employment of Latin and German in technical terms, the involved syntax of the author (often making his meaning obscure to a foreign reader), and the frequently erratic punctuation. A freer version, under the present circumstances, might have been more useful to the generality of readers; but we think it hardly necessary that the whole work should be done over again, and therefore rest content with adding explanatory notes where we feel any

doubt, either as to what is really meant in certain obscure passages, or as to whether we have succeeded in expressing what we believe to be their meaning intelligibly.

(1) THE FIRST PART OF THE ARTICLE (23 May, 1801).

("Sonnabends am 25 May, 1801")

V. Miscellaneous Notices.

Notice of a new Entomological Work by Hr. Prof. Jurine of Geneva.

Several published Papers and Serials have already given Notice in advance of an Enterprise extremely important to Entomology, which is to be undertaken by one of the most estimable and excellent of Entomologists, Hr. Prof. Jurine of Geneva. We can now not only confirm this Notice, but supplement it by the Statement, that this Enterprise is now really near Completion, the Work is actually in the Press, and already seven admirably engraved Copper-plates in med. quarto have been communicated by the Author to a German Entomologist * as Proofs for Inspection in Advance.

Provisionally therefore, until the Work can speak for itself, we can now make the entomological Public somewhat more closely acquainted with the Plan of this Enterprise, and detail in advance the Design of the *Author*, according to the Sheets that lie before us.

As Main-subject of his entomological Pursuits, Hr. Prof. Jurine has for years chosen, almost exclusively and by Preference, that Class of the Insects, which the late Chief-physician † von Linne has named Hymenoptera and Hr. Prof. Fabricius Piezata; and classified them by a novel Method ‡ never previously employed.

Its Foundation rests on the Wings of the Insects included therein, but especially on the Vessels dividing them, sometimes more, sometimes less reticulately, or what are called the Nerves and Veins. The three Orders, however, into which this Class of Insects has been subdivided by Hr.

* No doubt Panzer himself.

 \dagger Linné held this appointment in the Court of the King of Sweden.

‡ Nouvelle Méthode, it will be remembered, is the title which Jurine adopted for his book.

Prof. Jurine, are taken solely from the Situation and Attachment of the Unterleib (Abdomen) on to the Bruststück (Thorax), in short as follows: Ordo I. Abdomine prorsus sessili. Ordo II. Abdomine supra thoracem infixo. Ordo III. Abdomine petiolato: petiolo pone thoracem infixo. Accordingly under these three Orders are placed the whole company of Gattungen (Genera) Gall- Schlupf- Blatt- Goldetc. Wespen, the Wald- Blumen- Trauer Bienen, Hummeln, Mutillen, Ameisen,* etc.

(2) The Second Part of the Article (30 May, 1801).

("Sonnabends am 30 May, 1801.")

I. Miscellaneous Notices.

Notice of a new Entomological Work, by Hr. Prof. Jurine of Geneva. (Conclusion.)

The Main characters (Characteres primar.) of the Genera themselves, rest indeed chiefly and almost exclusively on the Vessels or the Nerves and Veins of the Wings, according as these sometimes more, sometimes less, interlace themselves by their anastomosis-like⁺ Concatenations and reticulate Connections, and form thereby variously shaped Cells, Lattices and Nets; but at the same time, lest this standing Character—so admirably adapted by reason of these it may be great Modifications, for the Establishment of natural Genera—should deteriorate into a cramping Onesidedness, the various Shapes of the Fühl-hörner (Antennae) and likewise the Kinnladen (Mandibulae) are also taken in subsidium as Characteres secundarii; though the Anastomoses of the Wing-veins and Nerves are still always the foremost or standing Characters of the genera.

At the same time it so happens that in the Establishment of the Genera by help of these Anastomoses, some

* Panzer uses these same popular German names, along with the Latin names cited from *Syst. Ent.*, throughout his *Fn. Ins. Germ.* Most of them are still in use colloquially in German; but we do not know whether this is the case as to the Waldbienen, Blumenbienen, and Trauerbienen, and have failed to gather from his work how he distinguished these groups from one another. Together they seem to include most *Anthophila*, except the Humble-bees (Hummeln).

† By this technical word Panzer's contemporaries (e.g. Kirby) were accustomed to express the running of one nervure into another, as a tributary discharges into a river, cf. (French) déboucher and (Engl.) disembogue. $\sigma\tau\delta\mu a$ = bouche, mouth.

of them indicate the Character of the Genera, while others on the contrary, and that regularly in the self-same Wing, declare the Character of the *Arten* (Species).*

Every Wing of the Insects belonging to this Class is divided as to its general Outline : into (1) Basis, (2) Apex, and (3, 4) Margines.

Every Wing is further divided as to the Areas contained in it shaped by its interlacing Vessels, and the resulting Anastomoses of the Nerves : into (1) the *Punctum*, (2) the *Radius*, (3) the *Cubitus*, (4) the *Nervi brachiales*, (5) the *Cellulae radiales*, (6) the *Cellulae cubitales*, and (7) the *Nervi recurrentes*.⁺ 5, 6, 7, however, furnish precisely those characteres generum only, which are absolutely necessary for Establishment of the Genus : they are therefore marked *red* \ddagger in *Tab. I of the Instructionstafel*, to make this Character catch the eye at once.

So, for Instance, the second Cellula cubitalis with its Stielgen (petiolata) betokens the principal generic Character of Nysson: the cellula cubitalis incompleta the altogether exceptional one of Chrysis: just as a peculiar lineola secans in the cellula radialis § indicates the character of the Genus Bremus.

Plates II, III, IV and V bring out very clearly these generic Characters in exactly \parallel and adequately enlarged representations of *Wings*. II and III each represent, in 20 quadrangular Compartments, just so many Wings or just so many Genera : on each of those following (IV and

* The meaning here may perhaps be made clearer by giving an example. The Genus *Miscophus* is known by a peculiar "petiolated" cell, and its various Species show, in the same cell, further characteristic differences of their own.

 \dagger Panzer here and elsewhere, after the old German fashion, treats the Latin terms which he is quoting according to the rules of Latin syntax, *i. e.* writes them as *accusatives*. We have thought it unnecessary to follow the original in this respect.

[‡] This is not the case in the copies of the *Nouv. Méth.* 1807 which have been consulted. In these the "characteristic" nervures are indicated otherwise, viz. by dotted lines, and the Plate referred to by Panzer as the "Instructionstafel" is altogether uncoloured, as are those following until Plate **6**.

§ Here Panzer accidentally misrepresents Jurine, who says quite correctly that the feature in question—a real but very inconspicuous one and generally ignored by describers—is found in the 1st *cubital* cell (not the *radial* !).

 \parallel We understand Panzer to mean that the enlargements are made correctly to scale and to an extent convenient for practical use.

V) in 24 Compartments, but somewhat smaller ones, are shown just so many Wings or Genera with their Nomenclature.* One can now, if one has distinctly grasped the Clavis methodi, very casily guide oneself aright. But what tends above all to facilitate the Comprehension of this Method are the figures of Species on the Plates following (cach with nine quadrangular Compartments) reproduced perfectly in gravure by the Master-hand of Citizen Massol from the incomparably accurate and beautiful Paintings of Hr. Prof. Jurine, in such manner that to each particular Genus there is assigned also one particular species.+ Accordingly, not merely does each Compartment or Quadrangle contain the entire Insect complete, and, if needful, considerably enlarged also: but likewise apart from this an Antenna, often also one for both Sexes, as well as a Mandible much enlarged, accompanied by the Name of the Insect. In this Way it is made almost impossible to go wrong, 1 and if in one's own Investigations, it is desired to ascertain the Generic-rights, even of unpublished insects, by merely first consulting the Plates of Wings, one will be so put in the right way by help of these Generic Tafeln, that all error can in consequence be avoided with certainty.

Since the Characters of the Wings, Antennae, and Mandibles are *uniform* beyond all Expectation, the Genera themselves become extremely *natural*: the apparent,§ forced or artificial, ceases consequently by degrees to be

* If this account of the Plates is compared in detail with the actual Plates 1 to 5 of the *Nouvelle Méthode* as published it will be found that they agree exactly.

[†] The statements in this last sentence do not quite agree with what seem to be the facts of the case. On the (eoloured) Plates VI and VII of the *Nouv. Méth.* as published, and also on all those following (except the last, which is unsigned and was evidently added later), appear the names of *Mlle.* (sic) *Jurine* as artist and *Gaister* (or ? *Gaisler*) as engraver. And it is stated by Klug (*Mon. Siric.*, p. 5, 1803) that Jurine's Figures were produced by his (Jurine's) daughter. We must leave these discrepancies of evidence as they stand. Possibly further facts may come to light which will account for them.

The words "to each particular Genus there is assigned also one particular species" deserve attention as indicating that the author had a more or less distinct conception of what are now called Genotypes—the fixation of a Genus by a species selected *ad hoc* !

‡ Panzer, however, did go wrong in certain cases when he tried to apply the Method himself.

§ We suppose this to mean "merely apparent"—(unreal or superficial?).

artificial, and one then sees simply the Species actually combined by Nature into a single Association, arranged among themselves according to Rules so precise, that it is wonderful why one has not learnt them from Nature long ago.

To make Lovers of these Insects acquainted in advance with the *Genera* established by this Method, the latter shall be here not only communicated, but also placed over against the *Fabrician* genera published already, so that it will then be easy to compare these genera of Hr. Prof. *Jurine* with those of Hr. Prof. *Fabricius*, or, if it seem good, to combine them.

[Here follows the (Latin) Tabulation of the Genera, which need not be repeated, and the Article then proceeds as follows]—

From the above Parallels one can easily see, how the Jurinean Genera are related to the Fabrician; how very closely many of the former approximate to the latter; how natural too are many Fabrician Genera, not liable to be superseded even by the Employment of this novel Method; and yet that this Class of Insects was bound to profit* in its turn enormously thereby, since Hr. Prof. Jurine, as well as the Wings, took also into consideration those Parts, on whose Importance Hr. Prof. Fabricius insisted with such Acuteness of perception.

To say more of Hr. Prof. Jurine's Enterprise would be too much of a transgression over the Limits of a merely preliminary Announcement. Let the above Statement suffice, till this Work can tell its own Tale.

The following works will be continually referred to in our notes :---

FABRICIUS, J. C.—Ent. Systematica 2 (1793): Suppl. (1798)— Systema Piezatorum (1804).

PANZER, G. W. F.—Fauna Ins. Germaniae 1–9 (Heft 1–109) (1793–1810)—[73–80 (1800): 81–4 (ante 3. IX. 1801): 85 (1801): 86–96 (ante 1. X. 1804)].

LATREILLE, P. A.—Précis Caract. Insectes (1796)—Hist. Nat. des Fourmis (1V. 1802)—Nouv. Dict. Hist. Nat. 24 (1804)—Hist. Nat. Crust. Ins. 3 (V–IX. 1802): 13 (1804–5): 14 (1804–5)—Genera Crust. Ins. 3 (1807): 4 (1809)—Concid. Générales (1810).

LAMARCK, J. M.—Systême des Animaux sans Vertèbres (I. 1801). JURINE, L., éd. PANZER, G. W.F.—Erlangen Litteratur—Zeitung 1. 160 (23. V. 1801): 161-5 (30. V. 1801)—JURINE, L.—Nouvelle Méthode de classes les Hyménoptères (1807).

* Panzer means, no doubt, the Study of this Class of Insects, etc.

"Ordo I. Abdomine prorsus sessili" (Jrn. Erl. Litt-Ztg. 1. 163 no. 1-11).

1.

II. TENTHREDO (L.) Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 1 Tenthredo-Tenthredo : antennis clavatis."

[*i. e.* TENTHREDO L. Syst. Nat. (ed. 10) 1. 555–9 no. 214 sp. 1–40 (1758); F. Ent. Syst. 2. pp. iv, 104–7 no. 138 sp. 1–11 (1793): Sppl. 214 (1798)—lutea L., *etc.*]

CIMBEX Olvr. (1790)

= TENTHREDO (p.) L. (1758) Jrn.; = CLAVELLARIUS Olvr. (1789) MN.; = $\dagger CLAVELLARIA$ (Olvr.) Lmk. (1801).

Type: Tenthredo lutea L. ([Lmk. 1801]; Ltr. 1802, 1804, 1810).

CIMBEX Olvr. [= CLAVELLARIUS Olvr. Enc. Meth. HN. 4. (Ins. 1) 22 no. 33 (1789) MN.]. CIMBEX Olvr. Enc. Meth. HN. 5. (Ins. 2) 760–72 sp. 1–16 (1790)—[sixteen species including lutea L.]: 6. (Ins. 3) 18 (1791); Ltr. Préc. Car. Ins. 107–8 no. 4 (1796). $\dagger CLAVELLARIA$ Lmk. Syst. An. sans Vert. 264 no. 116 (1801)—[Type: lutea L.]. **TENTHREDO* Jrn. Erl. Litt-Ztg. 1. 163 no. 1 (1801). CIMBEX Ltr. HN. Crust-Ins. 3. 300 (1802)—[Type lutea L.]: 13. 119–23 no. 325 sp. 1–11 Pf. 99⁻¹ (1804–5): Nouv. Dict. HN. 24. 172, 199 no. 370 (1804); F. Syst. Piez. pp. vii, 15–18 no. 1 sp. 1–12 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 15 (1806). **TENTHREDO* Jrn. Nouv. Méth. Hym. 45–8 no. 1 Pf. 2⁻¹, 6⁻¹ (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 390 (1882). CIMBEX Ltr. Gn. Crust-Ins. 3. 225–8 no. 425 (1807): Cons-Gén. Crust-Ins. 293, 435 no. 380 (1810); Crt. Br. Ent. 1. expl. Pl. 41 (1824); Wstwd. Syn. Gn. Br. Ins. 51 (1840); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 77, 95 (1911). [Olivier substituted *Cimbex* in lieu of *Clavellarius* Olvr. MN.

considering the latter too close to CLAVARIA (BOTANY)].

[nec *CLAVELLARIA (Lmk.) Crt. Br. Ent. 2. expl. Pl. 93 (1825) amerinae L. (PSEUDOCLAVELLARIA Schulz)].

Jurine intended to apply the name *Tenthredo* L. to the species included by that author and Fabricius in the group "*Antennis clavatis.*" That group had at an earlier date (1790) been separated from *Tenthredo* by Olivier under the name *Cimbex*, the author at the same time withdrawing a name (*Clavellarius*) which he had suggested, but without including in it any species, in the previous year.

The Type of *Cimbex* Olvr. (= $\overline{Tenthredo}$ Jrn.) is lutea L., which was designated by Latreille in "An. X" (*i. e.* between 22 Septr. 1801 and 21 Septr. 1802), and again in 1804, and 1810.

Already, in 1789, Thünberg had recognised that some distinction might be drawn between such species as *lutea* L., obscura L., etc. (*i. e.* the group with clavate antennae), TRANS. ENT. SOC. LOND. 1914.—PARTS III, IV. (FEB.) B B and suggested the introduction of a new genus Corynis $(xo\rho \psi \eta = a \text{ club}).$

This appears to be a valid publication of a new generic name, and therefore either *Cimbex* Olvr. or *Amasis* Leach must sink as a synonym of *Corynis* Thubg.; the latter (viz. *Amasis*) can be the better spared, and we propose therefore to designate obscura L. as the Type of *Corynis* Thubg. (1789) = *Amasis* Leach (1817).

CORVNIS Thuby. (1789)

n.syn. = AMASIS Leach. (1817).

Type: Tenthredo obscura L. (M. & D. 1915).

CORVNIS Thubg. Peric. Ent. Char. Gn. Ins. p. 13 (1789): Diss. Ac. 3. 260 (1801).

"CORYNIS h). Antennae capitatae. Abdomen fornicatum." "h) Sub hac denominatione innuimus *Tenthredinem luteam obscuram*, & hisce similes, quae alias iisdem notis insigniuntur, ac Genus insequens, *Tenthredo.*"

[This generic name is omitted from Rohwer's list.]

2.

I.2. CRYPTUS Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 2 Cryptus-Tenthredo antennis inarticulatis."

[*i. e.* TENTHREDO L. Syst. Nat. (ed. **10**) **1**. 555–9 no. 214 sp. 1–40 (1758): F. Ent. Syst. **2**. 108–10 no. 138 sp. 12–22 (1793)—rosae L.; coerulescens F.; etc.].

TENTHREDO L. (1758)

= †*TENTREDO* Lmk. (1801), †*THENTHREDO* Ltr. (1810); = *CRYPTUS* Jrn. (1801), †*CRUPTUS* Jrn. (1807); = *HYLOTOMA* Ltr. (1802); = ARGE Schrk. (1802).

Type 1: Tenthredo rosae L. (Lmk. 1801).

TENTHREDO L. [Fn. Suec. (ed. 1) 282–9 sp. 923–50 (1746) MN.]: Syst. Nat. (ed. 10) 1. 343 no. 213, 555–9 no. 214 sp. 1–40 (1758)—[2. lutea L.; 12 scrophulariae L.; 21 rosae L.; etc.]: Fn. Suec. (ed. 2) 388–95 sp. 1533–72 (1761); Poda Ins. Mus. Graec. 102-3 sp. 1–6 (1761) [nitens L.; rosae L.]; Slzr. Knuz. Ins. 141–3 no. 44 Pf. 18·109–13 (1761); Gffr. Hist. Ins. 2. 266–89 sp. 1–38 (1762); Scp. Ent. Carn. 274–81 sp. 719–38 (1763); Müller Fn. Ins. Fridrichs. pp. xxi, 69–70 no. 44 sp. 599–612 (1764); L. Syst Nat. (ed. 12) 1 (2). 359, 920–8 no. 242 sp. 1–55 (1767); Brkht. NH. Gt. Brit. 1. 162–3 (1769); Frstr. Nov. Sp. Ins. Cent. 1. pp. viii, 78–80 sp. 78–80 (1771); Scp. Ann. HN. 5. 120–1 sp. 142–3 (1772); Yeats Inst. Ent. 173–8 (1773); Müller L. Syst. Nat. 5 (2), 819–36 no. 242 sp. 1–55 (1775); Schrk. Beytr. Naturges 83–6 sp. 41–7 (1776); F. Gn. Ins. 112 no. 105 (1777); Blmbch. HB. Naturges, 1. 378 (1779); F. Sp. Ins. 1. 405–17 no. 108 sp. 1–61 (1781); Schrk. Enum. Ins. Austr. 322–43 sp. 648–93

(1781); Retz. De Geer Gn. et Sp. Ins. 71-4 no. 22 sp. 293-323 (1783); Leske Anfang. Naturges. 518-19 no. 54 (1784); Schmiedl. Einl. Kennt. Ins. 354-60 (1786); F. Mant. Ins. 1. 252-6 no. 112 sp. 1-64 (1787); Gmel. L. Syst. Nat. (ed. 13) 1 (5) 2653-71 no. 242 sp. 1-36, 38-66, 66-122, 122-6, 128-42 (1788); de Vill. Ent. Fn. Suec. 3. 78-126 no. 2 sp. 1–138 (1789); Brahm Ins-Kal. 1. pp. lxxix–lxxx (1790); Petagna Inst. Ent. 1. 345–53 no. 111 sp. 1–32 (1792); Pzr. Fn. Ins. Germ. 5.21, 7.9 (1793): 17.14-17 (1794): 26.20-1 (1796): 107.6-7 (1809); F. Ent. Syst. 2. pp. iv. 104-23 no. 138 sp. 1-78 (1793); Forst. Enchirid. NH. 154 no. 60 (1794); F. Sppl. Ent. Syst. 214-8 (1798); Cuvr. Tbl. Element. HN. An. 503-5 (1798); Cdrhlm. Fr. Ins. Prodr. Petrop. 145-53 no. 81 sp. 443-71 (1798). †TENTREDO Lmk. Syst. An. sans Vert. 263 no. 115 (I. 1801)-[Type rosae L.]. CRYPTUS Jrn. Erl. Litt-Ztg. 1. 163 no. 2 (V. 1801). HYLOTOMA Ltr. HN. Crust-Ins. 3. 302 (1802)-[Type: rosae L., F.]: 13. 133-5 no. 327 sp. 1-8 Pf. 99.2 (1804-5): Nouv. Dict. HN. 24. Tbl. Meth. 172-3, 199 no. 371 (1804). TENTHREDO Trtn. Syst. Nat. 3. 411-26 no. 82 (1802); Schrk. Fn. Boica 2 (2) 209, 230-52 no. 232 sp. 1993-2039 (1802); Pzr. Krit. Rev. Ins-Deutsch. 2. 15-53 (1806). CRYPTUS Jrn. Nouv. Méth. Hym. 49-51 no. 2. (†CRUPTUS) Pf. 2.2, 6.2 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 390 (1882). HYLOTOMA Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 81, 97 (1911).

Type 2 :--- Tenthredo coerulescens F. (Ltr. 1810).

**HYLOTOMA* Ltr. Cons-Gén. Crust-Ins. 293–4, 435 no. 381 (1810)— [Type: coerulescens F.]; Crt. Br. Ent. 2. expl. Pl. 65 (1825).

[Hylotoma Ltr. (1802) was a monotypical genus founded on rosae L., F.].

Type 3: Cryptus segmentarius Pzr. 88.17 (Rwr. 1911).

*CRYPTUS Pzr. Fn. Ins. Germ. 88:17 (1804)--[1. enodis L.; 2 segmentarius Pzr.]: 102:15-16 (1809): 109:8-10 (1810); Rwr. Ent. News 22. 219 (1911)--[Type: segmentarius Pzr.].

Type 4: Tenthredo dimidiata F. (Crt. 1838).

*TENTHREDO (L.) Crt. Br. Ent. 15 expl. Pl. 692 (1838)—[Type: dimidiata F.]

[Curtis cites dimidiata F. as Type—this was not one of Linné's exponents of *Tenthredo* !]

[nec *TENTHREDO (L.) Jrn. Erl. Litt-Ztg. 1. 163 no. 1 (1801): Nouv. Méth. Hym. 45–8 no. 1 Pf. 2·1, 6·1 (1807)—lutea L. (CIMBEX Olvr.)].

[nec *TENTHREDO (L.) Ltr. HN. Crust-Ins. 3. 300-2 (1802): 13. 123-33 no. 326 sp. 1-43 (1804-5): Gn. Crust-Ins. 3. 228-31 no. 426 (1807): Cons-Gén. Crust-Ins. 294. (†THENTHREDO) 435 no. 382 (1810); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 90, 97 (1911)-- scrophulariae L. (Allantus Jrn.)].

[nec *CRYPTUS (Jrn.) Crt. Br. Ent. 2. expl. Pl. 58 (1825): Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 77, 94 (1911)—furcata Vill. (SCHIZOCERA Lep.)].

[nec *§CRVPTUS F. Syst. Piez. pp. ix, 70–92 no. 10 sp. 1–103 (1804); Crt. Br. Ent. 14. expl. Pl. 668 (1837); Vrck. Bull. US. Nat. Mus. 83. 38, 185 (1914)—Type: viduatorius F. (Genus?)].

The name Cryptus Jrn. was first applied to the second Fabrician section of Tenthredo L., viz., "Antennis inarticulatis"—five of its species however do not possess this character and cannot therefore be types of Cryptus Jrn. In the Nouv. Méth. Hym. Jurine omits these, as also two other species which are South American.

But, before Jurine's *Cryptus* was published, Lamarck, in the month "Pluviose An. IX" (= January 1801), had already selected a species of this group as the Type of *Tenthredo* L.—*Cryptus* Jrn. can therefore only be regarded as a synonym of *Tenthredo* L., as defined by Lamarck. Although itself a synonym, the publication of this name *Cryptus*, in 1801, makes illegal the action of Fabricius in applying (Syst. Piez. 1804) the same name to a totally different group of *Hymenoptera*.

Cryptus F. (1804) is therefore a homonym of *Cryptus* Jrn. (1801) and the nomenclature of the *Ichneumonidae* will require considerable revision in consequence.

Jurine proposes to restrict *Tenthredo* to the section "Antennis clavatis," but Lamarck had already (January 1801) cited as Type for *Tenthredo* a species not belonging to that group, viz. rosae L.,F. What was this rosae? There is strong reason to think that Linné confused under the name rosae two. if not more, quite different insects, viz. Réaumur's "Saw-fly of the Rose," in which the antennae are not clavate, but inarticulate ("exarticulatis"), and Athalia rosae Auctt., in which also the antennae are not clavate, but 9 to 10-jointed ("septemnodiis" in Linné's classification).

In the Systema Naturae (editions 10, and 12), and also in Fauna Suecica, Linné describes his species as having seven-jointed antennae, and at Burlington House the only specimen ticketed in Linné's own hand as "rosae," with a reference to the 10th edition, is a specimen of Athalia rosae Auctt., but with this insect are placed, without labels, specimens of Réaumur's species, and the wellknown passages and figures of Réaumur, etc., are referred to by Linné himself in his synonymy.

Authors (e. g. von Dalla Torre, in his Catalogue) frequently recognise both an *Athalia rosae* L. and a *Hylotoma rosae* L., which, as shown by their references to Syst. Nat.,

etc., are both founded on the "*Tenthredo rosae*" of Linné. This being a composite species a choice must be made between the two insects, indicated on the one hand by Linné's expression "*antennis septemnodiis*," with which a specimen in his collection agrees, and, on the other hand, by Linné's citation of Réaumur's species and his adoption in a Latinised form of Réaumur's vernacular name. Réaumur's insect *is* attached to the Rose, the *Athalia* is *not*, so the name *rosae* should be restricted to Réaumur's species, which, by the way, is congeneric with that selected by Curtis as the Type in 1838 (viz. *dimidiata* F.), which, however, is not one of Linné's original types.

Lamarck describes the antennae simply as "filiformes," which tells us nothing, but there can be no doubt that in his view *Tenthredo rosae* L. meant Réaumur's well-known insect, the "Saw-fly of the Rose," and this selection of a Type, whatever may be the consequences, was apparently legitimate and irrevocable. *Tenthredo* Jurine is therefore a homonym of *Tenthredo* L. (see Lamarck), and the group "antennis clavatis" cannot be so called. Lamarck's selection of "*Tenthredo rosae* L.,F." (*i. e.* of Réaumur's "Saw-fly of the Rose") as the Type of *Tenthredo* reduces not only *Cryptus* Jurine, but also *Arge* Schrank, and *Hylotoma* Ltr. to synonyms of that genus.

Other species have been suggested by other authors as types of *Tenthredo*, e.g. *dimidiata* F., by Curtis (1838), which, though congeneric with *rosae* L. is not a Linnéan species and cannot be Type of a Linnéan genus.

Latreille's designation (1810) of *scrophulariae* L., which is accepted by Mr. Rohwer, is anticipated by Lamarck's selection of *rosae* L. in January 1801 (*scrophulariae* L. is the Type of the next Jurinean genus, viz. *Allantus*).

3.

I'3. ALLANTUS Jrn. Erl. Litt-Ztg. 1, 163. "Gen. 3 Allantus—Tenthredo: Scrophul. viridis, etc."

ALLANTUS Jrn. (1801)

= * TENTHREDO (L.) Ltr.

Type: Tenthredo scrophulariae L. (Crt. 1839).

ALLANTUS Jrn. Erl. Litt-Ztg, 163 no. 3 (V.1801)—[1. scrophulariae L.; 2. viridis L.; etc.]; Pzr. Fn. Ins. Germ. 88:18, 90:9, 91:13-19 (1804): Krit. Rev. Ins. Deutsch. 10, 15 25-40 (1806) · Jrn. Nouv.

Méth. Hym. 52-6 no. 3 Pf. 2·3, 6·3 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 390 (1882). **TENTHREDO* Ltr. Cons. Gén. Crust-Ins. 294. (†*THRENTHREDO*) 435 no. 382 (1810)—[Type: scrophulariae L.]. ALLANTUS Crt. Br. Ent. 16. expl. Pl. 764 (1839)—[Type: scrophulariae L.]; Wstwd. Syn. Gn. Br. Ins. 52 (1840); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20, 73, 97 (1911).

[nec * ALLANTUS Pzr. Fn. Ins. Germ. 82.12 (VII. 1801); Rwr. Ent. News 22. 73 (1911)—togata Pzr. (EMPHYTUS Klug)].

The Erlangen List (1801) enumerates under Allantus only two species, and one of these, scrophulariae L. was designated by Curtis (1839) as the Type of Allantus. Latreille (1802) whom Rohwer (1911) follows, cited this species as Type of *Tenthredo* L. (see preceding note, p. 373), but as *Tenthredo* L. had been previously furnished by Lamarck with rosae L. as its Type (I. 1801), Latreille's action was invalid and Curtis' selection should be accepted.

Panzer in September 1801 (Fn. Ins. Germ. 82.12) figures a "*Tenthredo togata* Fabricius," adding in the synonymy, but not on the plate,

> "*Tenthredo togata. Fabric.* inedit. *Allantus* Iurine. Legi saepius in dumetis."

Fabricius in 1804 (Syst. Piez. 32) describes a *Tenthredo* togata, adding "Habitat in Germania Dr. Panzer." In his diagnosis he describes a spot on the first segment, and the whole fifth segment of the abdomen as red.* In the description he says that a spot on the first segment, and the whole fifth segment are *white*—Panzer's figure shows no red on the body at all. The diagnosis clearly does not refer to the species taken "*in dumetis*" and figured by Panzer—the description however seems to do so.

Rohwer [Ent. News 22 p. 218 (1911)] makes "*Tenthredo* (Allantus) togata Panzer" (sic) Type of Allantus, accrediting this genus to Panzer, not Jurine, and calling it "monobasic"—but Allantus Jurine, May 1801, has precedence over "Allantus Jurine" Panzer, July–Septr. 1801—and togata was not included among Jurine's types; nor do its characters agree with those of the other insects figured and described as Allantus by Panzer in Fn. Ins. Germ., and in the Krit. Rev., so that evidently Panzer's reference of togata to Allantus Jrn. was a mere mistake.

* In Fallén's copy of the Syst. Piez., which is in the Ent. Soc. Library, "*rufis*" is corrected to "*albis*."

Tenthredo togata Pzr. (82.12) belongs really to the second division of Jurine's *Dolerus*, and this division was raised into a new genus, *Emphytus*, by Klug in 1813 (Type: *cincta* L.; Crt. 1833)—this name should therefore be restored.

Panzer reconsidered this question, in Krit. Rev. Ins. Deutsch., and included *togata* among the *Doleri* of Jurine, saying that it is very like *cincta*, which is the species figured by Jurine to illustrate *Dolerus*, second family [= *Emphytus* Klug].

In Nouv. Méth. Hym. (p. 58) Jurine also includes *togatus* Fabr., Panzer, in *Dolerus*, second family, but doubtfully, saying that he does not possess the species, and that if it belongs to this genus the cubital cells are not drawn correctly.

The above facts seem to necessitate : (1) the attribution of the genus *Allantus* to Jurine (Erlangen List, 1801), and not to Panzer (Fn. Ins. Germ.); (2) the rejection of *togata* Pzr. (and equally of *togata* F.) as a possible type for *Allantus*; and, (3) the retention of *Emphytus* Klug (Type : *cinctus* L.) as a properly applied name for the second family of Jurine's heterotypical genus *Dolerus*.

In 1911, Rohwer accepted Latreille's designation (1802) of gonager F. as the Type of *Dolerus* Jrn., but later in the same year (Ent. News 22. 219) he withdrew this, accrediting *Dolerus* to Panzer, and treating it as a monotypical genus with Type *pedestris* Pzr. This view we must reject, for *pedestris* Pzr. is not one of the species included in *Dolerus* of the Erlangen List—this was published in May 1801, while Panzer's figure appeared later in the year (before September).

4.

I.4. DOLERUS Jrn. Erl. Litt-Ztg. 1, 163. "Gen. 4 Dolerus—Tenthredo germanica, gonagra, etc."

DOLERUS Jrn. (1801)

Type 1: Tenthredo gonagra F. (= gonager Jr.; Ltr. 1810).

DOLERUS Jrn. Erl. Litt-Ztg. 1. 163 no. 4 (30. V. 1801)--[1. germanica F.; 2. gonagra F.; etc.]; Pzr. Fn. Ins. Germ. 82:12 (VII. 1801): Krit. Rev. Ins. Deutsch. 2. 10, 15, 40-4 (1806); Jrn. Nouv. Méth. Hym. 57-8 no. 4 Pf. 2:4, 6:4 (1807); F-G. K. & K. MT. Schweiz Ent. Ges. 6. 390 (1882); Ltr. Cons-Gén. Crust-Ins. 294, 435 no. 383 (1810)--[Type: gonager Jrn.]; Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20, 78, 94 (1911).

Type 2: Tenthredo pratensis L. (= *pedestris* Pzr. 82·11; Rwr. 1911). * *DOLERUS* Pzr. Fn. Ins. Germ. 82·11 (VII. 1801); Rwr. Ent. News. 22. 219 (1911)—[Type: pratensis L. (= *pedestris* Pzr.).

Latreille, in 1810, cited gonager Jrn. as the Type of Dolerus Jrn., and Rohwer accepted this species as the Type of Dolerus Pzr. (Krit. Rev., 1806) in his Genotypes of the Sawflies (1911); later in the same year, however, Mr. Rohwer (Ent. News 22, 219) traced the genus back to 1801 (Panzer, Fn. Ins. Germ.) and designated pratensis L. (= pedestris Pzr. 82·11) as the Type. Jahrgang 7 of the Fauna Ins. Germ. is dated 3 September, 1801, but we now know that Dolerus Jurine was first published in the Erlangen List, 30 May 1801. Latreille's citation of Tenthredo gonagra F. will therefore remain valid.

5.

I.5. NEMATUS Jrn. Erl. Litt-Ztg. 1. 163. "Gen. 5 Nematus—Tenthredo capreae, septentrionalis, etc."

NEMATUS Jrn. (1801)

= CROESUS Leach (1817).

Type: Tenthredo septentrionalis L. (Ltr. 1810).

NEMATUS Jrn. Erl. Litt-Ztg. 1. 163 no. 5 (30. V. 1801) [1. capreae L., F.; 2. septentrionalis L.]; Pzr. Fn. Ins. Germ. [82:10 (VII. 1801)]: 90:10-11 (1804): Krit. Rev. Ins. Deutsch. 2. 10, 15, 44-6 (1806); Jrn. Nouv. Méth. Hym. 59-60 no. 5 Pf. 2:5, 6:5 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 390 (1882); Ltr. Cons. Gén. Crust-Ins. 294, 435 no. 384 (1810)-[Type: septentrionalis F., Jrn.]; Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 84, 97, 99 (1911). [nec * NEMATUS (Pzr.) Rwr. Ent. News 22. 219 (1911)-lucida

Pzr. (HOLCOCNEME Knw.)].

Latreille cited *septentrionalis* L. as the Type of *Nematus*. This is a well-identified species, and being one of the original types of the Erlangen List should be accepted.

Rohwer [US. Dp. Agr. (Ent.) Tech. Ser. 20. 84, 97, 99 (1911)] adopted Latreille's designation of septentrionalis L. as the Type of Nematus Pzr., but later [Ent. News 22, 219 (1911)] retracts this and makes Tenthredo lucida Pzr. [Fn. Ins. Germ. 82·10 (VII. 1801)] the Type of the "monobasic" genus Nematus Pzr., sinking accordingly Holcocneme Knw. (whose Type crassa Fallén is congeneric with lucida Pzr.) as = Nematus Pzr., but this figure was published subsequently to the appearance of the Erlangen List (30. V. 1801), and lucida is not one of Jurine's original types

-Holcocneme Knw. may therefore still be used for the group which includes *lucida* Pzr. and *crassa* Fallén.

Crossus Leach, with Type septentrionalis L. [cited by Rohwer US. Dp. Agr. (Ent.) Tech. Ser. 20. 77, 97, 99 (1911)] must therefore sink as synonymous with Nematus Jrn.—*Nematus Knw. is a different genus, and has accordingly been renamed by Rohwer Nematinus, with Type abdominalis Pzr.

[The second Nematus of the Erlangen List is capreae. In Systema Naturae (ed. 10) we find Linné describing a larva as *capreae*, saying that he did not know the imago; in the 12th edition Linné repeats his description and adds a reference to *Tenthredo salicis* Fn. Suec. 1752. This Tenthredo salicis we now find is the well-known and very remarkably coloured larva of a very common Pteronidea, which has been admirably figured, together with its imago, by Goedart, and these figures, and also others representing the same species in other works, are referred to in the synonymy of the Fauna. Now, reverting to the 10th edition, we find an imago described as *salicis*, evidently the imago of the same species, and here again Goedart's and the other figures are referred to; the imago is no doubt the species universally known as T. salicis L., this is attached to Salix, and has the character mentioned by Linné of a black stigma, which is exceptional in *Pteronidea*. We infer from these facts that *capreae* L. is a synonym of salicis L., and that the Pachynematus referred by many authors to *capreae L. (=trisignatus Forst.), chiefly on the authority of a figure in Panzer, is a different species. Panzer's figure (65.8), from its very short antennae and other characters, appears to represent, not a Pachynematus Knw., nor a Pteronidea Rwr., but an Amauronematus Knw. (perhaps A. vittatus Lep.). The mistake appears to have been partly due to the omission by Linné (in ed. 12) to repeat his remark as to the black stigma. Fabricius and Gmelin, under capreae, describe an imago with pale stigma, particoloured mesonotum, and other characters which agree with Panzer's figure, but are quite inconsistent with Linné's own account of salicis. Also, the true salicis is attached to Salix, but Fabricius and Gmelin add a statement that this larva devastates the Red Currant (apparently confusing it with ribesii, or some such species.

The *capreae* of Cameron, etc., feeds on sedge and grasses, and naturally it has never been suggested that this form has anything to do with T. *salicis* L.]

6.

I.6. PTERONUS Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 6 Pteronus-Tenthredo: antennis pectinatis."

[*i.e.* TENTHREDO F. Ent. Syst. 2. 111-12 sp. 23-8 (1793): Sppl. Ent. Syst. 214-5 (1798)—pini L., etc.]

PTERONUS Jrn. (1801)

= DIPRION Schrk. (1802); = LOPHYRUS Ltr. (1802); = ANA-CHORETA Gistel. (1848); = CRISTIGER Gistel. (1848).

Type: Tenthredo pini L. (Pzr. 1804; Ltr. 1802; Rwr. 1911).

PTERONUS Jrn. Erl. Litt-Ztg. **1**. **163** no. **6** (V. **1801**). § *LOPHYRUS* Ltr. HN. Crust-Ins. **3**. 302 (1802)—[Type : **pini** L.]: **13**. 135–7 no. 328 sp. 1–4 (1804–5): Nonv. Dict. HN. **24**. 173, 199 no. 372 (1804): Gn. Crust-Ins. **3**. 232 no. 428 (1807): Cons-Gén. Crust-Ins. 295, 435 no. 387 (1810). *DIPRION* Schrk. Fn. Boica **2** (2). 209, 252–4 no. 233 sp. 2040–2 (1802). PTERONUS Pzr. Fn. Ins. Germ. **87**·17 (1804)—[Type: **pini** Pzr.]: Krit. Rev. Ins. Deutsch. **2**. 10, 15, 46–8 (1806); Jrn. Nouv. Méth. Hym. **61**–4 no. 6 Pf. 2·6, **6**·6 (1807); F-G. K & K. MT. Schweiz. Ent. Ges. **6**. 390 (1882). *DIPRION* Rwr. US. Dp. Agr. (Ent.) Tech. Ser. **20**. 78, 82, 88, 96, 98 (1911)—[Type: **pini** L.]. PTERONUS Rwr. Ent. News **22**. 219 (1911).

[§ Lophyrus Ltr. is homonymous with LOPHYRUS Poli (1791) Moll.]

Pteronus Jrn. in the Erlangen List is defined as the equivalent of Fabricius' third section of Tenthredo (Antennis pectinatis). That division includes nominally four (really three) species of the genus commonly called Lophyrus Ltr. [this name however is preoccupied in Mollusca by Poli (1791)]-one Monoctenus, and one Megalodontes, to these, in the Supplement, Fabricius adds another, furcata Vill., but Panzer (Krit. Rev., 1806) states that the peculiar structure of the antennae in furcata \mathcal{F} is not a real pectination, and that they are ciliated as in ustulata and enodis (i. e. as in Tenthredo L. as employed in these notes), and in fact, furcata is much nearer to rosae L. than to any species of the group under consideration. The commonest and best-known of the possible types is *pini* L., and this species, together with two others (also possible types, but not congeneric with it), have been called by Schrank Diprion, which name Rohwer has adopted with Type pini L.,

sinking *Pteronus* Pzr. as a synonym of it. *Pteronus* Jrn., however, has precedence by a year over *Diprion* Schrank, and the former name with Type *pini* L., designated by Rohwer, should be restored. *Pteronus* Knw., founded on Jurine's third family of *Pteronus* in the Nouv. Méth. Hym., which would not be a *Pteronus* according to the Erlangen List, becomes a homonym and is to be replaced by *Pteronidea* Rwr. (1911).

7.

I.7. CEPHALCIA Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 7 Cephalcia-Tenthredo : antennis multiarticul."

[i.e. TENTHREDO F. Ent. Syst. 2, 121-3 sp. 66-78 (1793): Sppl. Ent. Syst. 218 (1798)—signata F., etc. Jurine included under "Cephalcia" Fabricius' sixth section "Antennis filiformibus: articulis plurimis"—each species in this section is described by Fabricius as "Tenthredo antennis multiarticulatis."]

CEPHALEIA Jrn. (1801)

† CEPHALCIA Jrn. (1801), ‡ CEPHALEIA Pzr. (1806), Jrn. (1807).

Type: Tenthredo signata F. (Rwr. 1911).

CEPHALEIA Jrn. = † CEPHALCIA Jrn. Erl. Litt-Ztg. 1. 163 no. 7 (V. 1801); Pzr. Fn. Ins. Germ. 86[•]8–9, 87[•]18 (1804). CEPHALEIA Pzr. Krit. Rev. Ins. Deutsch. 2. 10, 15, 48–50 (1806); Jrn. Nouv. Méth. Hym. 65–7 no. 7 Pf. 2[•]7, 7.7 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 390 (1882); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20, 76, 97 (1911)—[Type: signata F.]. † CEPHALCIA Rwr. Ent. News 22, 218 (1911).

"Cephalcia" in the Erlangen List must be a mere misprint, for on two of the Plates (Pl. 2 and 7 no. 7) which were seen by Panzer, and are described correctly as to all details in his paper, the word is engraved Cephaleia. Panzer afterwards repeated the mistake three times in the Fauna Germanica (86.8, 86.9, and 87.18), but in the Kritisch Revision he restored the spelling Cephaleia, printing the e in a somewhat larger type than the other letters of the word—evidently therefore intending to correct his former spelling. Jurine himself throughout the Nouvelle Méthode, both in the text and on the plates, invariably writes Cephaleia. This name one cannot doubt was meant to be derived from $\varkappa e \varphi a \lambda \eta$, and if so, such a form as Cephalcia is an absolute impossibility. Cephaleia is not irreproachable, but the objections to it are not so obvious, and Jurine, who was at most only a fair classical scholar, may have failed to recognise them.

Rohwer in 1911 cited signata \mathbf{F} . as the Type of Cephaleia Pzr., and since Panzer attributes this genus to Jurine, we may take the citation as applying also to Cephaleia (†Cephalcia) Jrn.

8.

I.8. ORYSSUS (F.) Jrn. Erl. Litt-Ztg. 1. 163. "Gen. 8 Oryssus—Oryssus Supplem."

[i. e. ORYSSUS F. Sppl. Ent. Syst. 209, 218-9 sp. 1-2 (1798) abietina Scp. (= vespertilio F.; = coronatus F.)].

ORYSSUS F. (1798)

= †*ORUSSUS* Ltr. (1796) *MN*.

Type: Sphex abletina Sep. (= vespertilio F.; = coronatus F.; F. 1798).

ORYSSUS F. [= ORUSSUS Ltr. Préc. Car. Ins. 111 no. 10 (1796) MN.]. ORYSSUS F. Sppl. Ent. Syst. 209, 218–9 sp. 1–2 (1798)— [Type: abietina Sep. (= 1. coronatus F.; = 2. vespertilio F.)] Lmk. Syst. An. sans Vert. 264–5 no. 118 (I. 1801); Jrn. Erl. Litt-Ztg. 1. 163 no. 8 (V. 1801); Ltr. HN. Crust-Ins. 3. 305 (1802): 13. 157–60 no. 334 sp. 1 (1804–5); Klug Mon. Siric. Germ. 1–8 Pf. 1–1–3, 8–1–8 (1803); Ltr. Nouv. Dict. HN. 24. 173 no. 378 (1804); F Syst. Piez. pp. viii., 47 no. 6 sp. 1 Ind. 21 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 54 (1806); Jrn. Nouv. Méth. Hym. 68–9 no. 8 [† ORUSSUS] Pf. 2°8, 7~8 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 390 (1882); Ltr. Gn. Crust-Ins. 3. 245–9 no. 434 (1807); Cons-Gén. Crust-Ins. 296, 436 no. 392 (1810); Crt. Br. Ent. 10 expl. Pl. 460 (1833); Wstwd. Syn. Gn. Br. Ins. 55 (1840); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20, 85, 93 (1911).

This genus was proposed by Fabricius, in 1798, for two supposed species coronatus F. and vespertilio F., but as these are both identical with abietina Scp. the genus was monotypical in its inception. Latreille had previously published Orussus, in 1786, but without exponents—on the Plates of the Nouvelle Méthode the name also appears as Orussus, but this was corrected to Oryssus in the text, as also in the Erlangen List—this suggests that Jurine's plates were engraved before the publication of Fabricius' Ent. Syst. (1798) in which the name first appeared as Oryssus.

I'9. ASTATUS Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 9 Astatus—Sirex pygmaeus. Banchus spinipes Panzer (Banchus viridator Fabric. inedit.)."

ASTATUS Jrn. (1801)

= CEPHUS Ltr. (1802); = TRACHELUS Jrn. (nn. 1807).

Type: Sirex pygmaeus L. (Jrn.; = spinipes Pzr.; Jrn. 1801; Ltr. 1810).

ASTATUS Jrn. Erl. Litt-Ztg. 1. 163 no. 9 (30. V. 1801)—[Type: pygmaeus L. (= spinipes Pzr.; = viridator F., LN.)]; Pzr. Fn. Ins. Germ. 83:12 (1801): 85:10-11 (1804). CEPHUS Ltr. HN. Crust-Ins. 3. 303 (1802)—[Type: pygmaeus L.]: 13. 141-5 no. 331 sp. 1-4 Pf. 99'3 (1804-5). ASTATUS Klug Mon. Siric. Germ. 45-56 sp. 1-8 Pf. 7:1-3, 8:26-30 (1803). CEPHUS Ltr. Nouv. Dict. HN. 24 Tbl. Méth. 173, 199 no. 375 (1804); F. Syst. Piez. pp. vii, 250-2 no. 47 p. 1-6 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 143-5 (1806) [= Trachelus Jrn.]. TRACHELUS Jrn. Nouv. Méth. Hym. 70-2 no. 9 Pf 2:9, 7:9 [nn. = Astatus Jrn.—(Type: pygmaeus L.)]; F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882). CEPHUS Ltr. Cons-Gén. Crust-Ins. 296, 435 no. 390 (1810); Crt. Br. Ent. 7. expl. Pl. 301 (1830); Wstwd. Syn. Gn. Br. Ins. 55 (1840); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 76, 96 (1911).

[nec *ASTATA Ltr. [Préc. Car. Ins. p. xiii., (ASTATUS) 114-5 no. 14 (1796) MNN.] HN. Crust-Ins. 3. 336-7 (1802) 13. 297 no. 394 sp. 1 (1804-5); Ltr. Gn. Crust-Ins. 4. 67-9 no. 490 (1809); Cons-Gén. Crust-Ins. 322, 438 no. 480 (1810)—Type: boops Schrk. (= abdominalis Ltr.) (DIMORPHA Ltr.)].

[nec * ASTATUS Pzr. Fn. Ins. Germ. 83'12 (VII. 1801)—[troglodyta F.]: 85'11-12 (1801); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 74, 79, 97 (1911): Ent. News 22. 218 (1911)—Type: troglodyta F. (EUMETABOLUS Schulz)].

[nec * TRACHELUS (Jrn.) Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 91 97, (1911)—Type: tabidus F. (= TRACHELASTATUS nn.)].

[nec *CEPHA Blbg. Ènum. Ins. Blbg. 98 (1820); Rwr. Ent. News 22. 218 (1911)—Type: tabida F. († tibida Rwr.) (TRACHELASTATUS nn.)].

Latreille (Préc. Car. Ins. p. xiii) proposed the name *Astata* for a genus which he promised to describe later, stating, at the same time, that he had intended to call it *Astatus*, but wished not to do so to avoid confusion with his genus *Astacus* (*Crust.*)—in the body of the work (p. 114–5) the genus is described as *Astatus*.

Having no exponents Astata (Astatus) Ltr. had no scientific status until 1802, and could not in the meantime preoccupy the same name used in another sense by another author—Astatus Jurine (proposed in May 1801) for a genus of *Tenthredinidae*, with properly designated exponents, is therefore a valid name, and its exponents being all synonyms of one species (*pygmaeus* L.) the genus is virtually a monotypical one.

In 1807 Jurine proposed a new name *Trachelus* in lieu of *Astatus* Jrn., remarking (Nouv. Méth. Hym. 72):

"J'avais d'abord donné à ce genre le nom d'astatus, qui a été adopté par MM. Panzer et Klug; mais des considérations particuliéres m'ont engagé à lui substituer celui de trachelus "—but this alteration of a name published six years previously in the Erlangen List cannot be accepted.

The Type of both *Astatus* Jrn. and *Cephus* Ltr. is **pygmaeus** L.—this species is also the type of *Trachelus* Jrn. (nn.).

Konow made Astatus, Trachelus, and also Cephus, etc., distinct genera, and Rohwer, apparently following him to some extent, gives to Astatus Jrn. the Type: troglodyta F., to Cephus Ltr. the Type: pygmaeus L., and to Trachelus Jrn. the Type: tabidus F. These divisions are probably of generic value, but the names proposed are unavailable in these senses—also troglodyta and tabidus are species not included in the Erlangen List. Rohwer also revives the name Cepha Billberg (with Type: tabidus F.), calling it isogenotypic with Trachelus Jrn.; it may be proved that the name Cepha Billberg is valid, but owing to its similarity to Cephus Ltr., Cepha Billberg would be a very undesirable name in the Hymenoptera and TRACHELASTATUS (nn.) is here suggested in its place.

*Astatus Knw. has been renamed by Schulz [Spolia Hym. 211 (1906)] Eumetabolus—with Type : niger Harris (*i. e. troglodyta*)—the identification of niger, however, with the Type-species of a genus which is almost certainly not British at all, rests on very sandy foundations. The niger of British collections = satyrus Pzr.

10

I'10. §UROCERUS Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 10 Urocerus-Sirex Camelus, Dromedarius."

XIPHYDRIA Ltr. (1802)

= § UROCERUS Jrn. (1801) nec Geoffr-Fourer. ; = HYBONOTUS Klug (1803) ; = †XIPHYDRA (Ltr.) Pzr. (1806).

Type 1: Ichneumon camelus L. (Ltr. 1802; 1804).

XIPHYDRIA Ltr. = §*UROCERUS* Jrn. Erl. Litt-Ztg. 1. 163 no. 10 (1801)—[camelus L.; dromedarius L.]. XIPHYDRIA Ltr. HN. Crust-Ins. 3. 304 (1802)—[Type: camelus L.]: 13. 145–6 no. 332 sp. 1–3 (1804–5). *HYBONOTUS* Klug Mon. Siric. Germ. 9–16 sp. 1–2 Pf. 1⁴–7, 8'9–15 (1803)—[Type: camelus L.] XIPHYDRIA Ltr. Nouv. Dict. HN. 24. Tbl. Méth. 173, 199 no. 376 (1804); F. Syst. Piez. pp. ix, 52–3 no. 8 sp. 1–3 (1804). §*UROCERUS* Pzr. Fn. Ins. Germ. 85¹0 (1805) †*XIPHYDRA* Pzr. Krit. Rev. Ins. Deutsch. 2. 56–7 (1806).

XIPHYDRIA Ltr. Gn. Crust-Ins. **3**. 237–8 no. 432 (1807). §*UROCERUS* Jrn. Nouv. Méth. Hym. 73–5 no. 10 Pf. **2**·10, 7·10 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. **6**. 391 (1882); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. **20**. 81, 92, 93 (1911).

Type 2: Sirex dromedarius F. (Ltr. 1810).

*XIPHYDRIA (Ltr.) Ltr. Cons. Gén. Crust-Ins. 296, 436 no. 391 (1810)—[Type: dromedarius L.]; Wstwd. Syn. Gn. Br. Ins. 55 (1840).

[Having described the monotypical genus Xiphydria for camelus L., in 1802, it was not open to Latreille to cite dromedarius F. as the Type in 1810!].

[nec UROCERUS [Gffr. (1762) MN.] Gffr-Fourer. Ent. Paris 2. 362–3 no. 84 (1785)—[Type: gigas L. (SIREX L.)].

§Urocerus Jrn., represented in the Erlangen List by camelus L., F., and dromedarius F. is homonymous with Urocerus (Gffr. 1762) Gffr-Fource. (1785) a monotypical genus with Type: gigas L. §Urocerus Jrn. must be replaced by Xiphydria Ltr. (1802) whose Type is camelus L. Urocerus Gffr. is synonymous with Sirex L., consequently Urocerus is invalid in either sense.

11

I'11. SIREX (L.) Jrn. Erl. Litt-Ztg. 1'163.

"Gen. 11 Sirex-Sirex Gigas."

[*i.e.* SIREX L. Fn. Suec. 396 sp. 1573-7 (1761); F. Ent. Syst. 2. pp. iv, 124-32 no. 139 sp. 1-16 (1793)—gigas L., etc.]

SIREX L. (1761)

= UROCERUS [Gffr. (1761) MN] Gffr-Fourer. (1784).

Type: Sirex gigas L. (Blmbch. 1779; Lmk. 1801).

SIREX L. Fn. Suec. (ed. 2) pp. [41], 396-7, sp. 1573-7 (1761).
[UROCERUS Gffr. Hist. Ins-Paris 2, 264-6 (1762) MN.] SIREX L.
Syst. Nat. (ed. 12) 1 (2) 539, 928-30 no. 243 sp. 1-7 (1767) Blmbch.
HB. Naturges. 1. 378-9 no. 55 sp. 1 (1779) [gigas L.]; Leske
Anfangs. Naturges. 519 (1779, 1784). UROCERUS Gffr-Fourcr.
Ent. Paris 2, 362-3 no. 84 (1785)--[Type: gigas L.]. SIREX F.
Ent. Syst. 2. pp. iv, 124-32 no. 139 sp. 1-26 (1793); Ltr. Préc.
Car. Ins. 106 no. 2 (1796); Pzr. Fn. Ins. Germ. 52:15-21 (1798);
Lmk. Syst. An. sans Vert. 264 no. 117 (1801)--[Type: gigas L.]
Jrm. Erl. Litt-Ztg. 1. 163 no. 11 (1801). UROCERUS Ltr. HN.
Crust-Ins. 3. 304-5 (1802): 13. 147-57 no. 333 sp. 1-6 Pf. 99:4 (1804-5): Dict. HN. 24. Tbl. Méth. 173 no. 377 (1804). SIREX
Klug. Mon. Siric. Germ. 17-44 sp. 1-7 Pf. 2:1-5, 3:1-5, 4:1-6, 5:1-5, 8:16-25 (1803); F. Syst. Piez. pp. ix, 48-51 no. 7 sp. 1-15
(1804); Pzr. Krit. Rev. Ins. Deutsch. 2, 54-6 (1806); Jrm. Nouv.

Méth. Hym. 76–9 no. 11 Pf. 2[•]11, 7[•]11 (1807). UROCERUS Ltr. Gn. Crust-Ins. 3. 238–45 no. 433 (1807): Cons-Gén. Crust-Ins. 297, 436 no. 393 (1810); Wstwd. Syn. Gn. Br. Ins. 55 (1840). SIREX Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 89, 91, 94 (1911).

Type 2: Sirex noctilio F. (= * juvencus Crt.; Crt. 1829). *SIREX (L.) Crt. Br. Ent. 6. expl. Pl. 253 (1829)—[Type: noctilio F. (=* juvencus Crt.)].

Lamarck (1801) cited gigas L. as the Type of Sirex L. this was the only exponent of that genus in the Erlangen List, as also in Blumenbach (1779), Leske (1779) etc., Curtis eited "juvencus" (i. e. noctilio F.) as the Type in 1829, but gigas has always been regarded as the Type of Sirex L.

"Ordo II. Abdomine supra thoracem infixo" (Jrn. Erl. Litt-Ztg. 1. 163 no. 1-4).

Neither of the present writers having studied any insects belonging to Jurine's Order 2, nor the first three genera of his Order 3 (*Ichneumon, Anomalon*, and *Bracon*) they are unable to do more than to collect evidence as to the early history of these names.

12

II.1. EVANIA (F). Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 1 Evania — Evania appendigaster, minuta : praeter utramque nulla."

[*i. e.* EVANIA F. Syst. Ent. 345 no. 108 sp. 1-2 (1775): Ent. Syst. 2. pp. v, 192-4 no. 141 sp. 1-6 (1793): Sppl. 241-2 (1798)—appendigaster L., etc.].

EVANIA F. (1775)

Type: Ichneumon appendigaster L. (Lmk. 1801; Ltr. 1802-1810).

EVANIA F. Syst. Ent. [25], 345 no. 108 sp. 1–2 (1775)—[1. appendigaster L.; 2. maculata F]: Ent. Syst. 2 pp. v, 192–4 no. 141 sp. 1–6 (1793); Ltr. Préc. Car. Ins. 114 no. 13 (1796); F. Sppl. Ent. Syst. 241–2 (1798); Pzr. Fn. Ins. Germ. 62·12 (1799); 77·10 (1800); Lmk. Syst. An. sans Vert. 267 no. 123 (1801)— [Type: appendigaster L.]; Jrn. Erl. Litt-Ztg. 1. 163 no. 1 (1801); Ltr. HN. Crust-Ins. 3. 330 (1802)—[Type: appendigaster L., F.]; 13. 193–4 no. 340 sp. 1–2 Pf. 101·1 (1804–5): Nouv. Dict. HN. 24. Tbl. Méth. 175 no. 385 (1804); F. Syst. Piez. pp. ix, 178–80 no. 28 sp. 1–8, Ind. 11–12 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 105 (1806); Jrn. Nouv. Méth. Hym. 84–5 no. 1 Pf. 2·1, 7·1 (1807); F-G. K. & K. MT Schweiz. Ent. Ges. 6. 391 (1882); Ltr. Cons-Gén. Crust-Ins. 297, 436 no. 395 (1810); Crt. Br. Ent. 6 expl. Pl. 257 (1829); Wstwd. Syn. Gn. Br. Ins. 56 (1840); Viereck US. Nat. Mus. Bull. 83. 58, 160 (1914).

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11.2. FOENUS (F.) Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 2 Foenus-Foenus Supplem."

[*i.e.* FOENUS F. Sppl. Ent. Syst. 210–11, 240 sp. 1–2 (1798) *jaculator* L. and assectator L.]

FOENUS F. (1798)

= GASTERUPTION Ltr. (1796) MN.; ‡GASTERYPTION Smnv.

Type 1: Ichneumon assectator L. (Ltr. 1802; Crt. 1832).

FOENUS F. [= $G_{ASTERUPTION}$ Ltr. Préc. Car. Ins. 113-4 no. 12 (1796) MN.]. FOENUS F. Sppl. Ent. Syst. 210-11, 240 sp. 1-2 (1798)—[1. jaculator L.; 2. assectator L.]; Jrn. Erl. Litt-Ztg. 1. 163 no. 2 (1801); Ltr. HN. Crust-Ins. 3. 329 (1802)—[Type: assectator L., F.]: 13. 194-5 no. 341 sp. 1-2 (1804-5): Ltr. Nouv. Diet. HN. 24. Tbl. Méth. 175 no. 386 (1804); F. Syst. Piez. pp. viii, 141-2 no. 19 sp. 1-3 (1804); Jrn. Nouv. Méth. Hym. 86-8 no. 2 Pf. 2:2, 7:2 (1807); F.G. K. & K. MT. Schweiz. Ent. Ces. 6. 391 (1882); Crt. Br. Ins. 9. expl. Pl. 423 (1832)—[Type: assectator L.]. GAS-TERUPTION Viereck US. Nat. Mus. Bull. 83. 60, 61, 161 (1914).

Type 2: Ichneumon jaculator L. (Pzr. 1804-6; Ltr. 1810).

*FOENUS (F.) Pzr. Fn. Ins. Germ. 96¹⁶ (1804)—[jaculator L.]: Krit. Rev. Ins. Deutsch. 2. 90 (1806); Ltr. Cons-Gén, Crust-Ins. 298, 436 no. 396 (1810)—[Type: jaculator L., F.]; Wstwd. Syn. Gn. Br. Ins. 56 (1840)—[Type: jaculator L.]; Viereck US. Nat. Mus. Bull. 83. 60, 171 (1914).

Latreille described Gasteruption in 1796 without exponents, and in 1802 he sunk this generic name as synonymous with Foenus F., giving as the common exponent of both assectator L., F.—Latreille's subsequent citation (in 1810) of jaculator L., F. as the Type of Foenus F., though accepted by Westwood (1840) and Viereck (1914) is invalid, and assectator L., F. (= $\dagger affectator$ Viereck) must be adopted as the Type of both Foenus L. and Gasteruption Ltr. (teste Ltr. 1802).

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II.3. Aulacus Jrn. Erl. Litt-Ztg. 1. 163. "Gen. 3 Aulacus."—[No types—a mere logonym.]

AULACUS Jrn. (1807)

AULACUS Jrn. (1801) LN.

Type: Aulacus striatus Jrn. (Jrn. 1807; Ltr. 1810).

AULACUS Jrn. [Erl. Litt-Ztg. 1. 163 no. 3 (1801) LN.] Nouv. Méth. Hym. 89–90 no. 3 Pf. 2[.]3, 7[.]3 (1807)–[Type: striatus Jrn. Pf. 7[.]3]; F-G. K. & K. MT. Schweiz Ent. Ges. 6. 391 (1882); Ltr. TRANS. ENT. SOC. LOND. 1914.—PARTS III, IV. (FEB.) C C

Cons-Gén. Crust-Ins. 298, 436 no. 398 (1810); Viereek US. Nat. Mus. Bull. 83. 18, 183 (1914).

Aulacus is merely mentioned as a Jurinean name in the Erlangen List (1801) without exponents, and only became validated in 1807.

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II.4. STEPHANUS Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 4 Stephanus-Ichneumon serrator Supplem."

STEPHANUS Jrn. (1800)

Type: Ichneumon servator F. (= coronatus Jrn.; Jrn. 1800; Jrn. 1801, 1807).

STEPHANUS Jrn., Pzr. Fn. Ins. Germ. 76.13 (1800)—[Type: serrator F. (= coronatus Jrn.)]: Jrn. Erl. Litt-Ztg. 1. 163 no. 4 (30. V. 1801)—[Type: serrator F.]: Prz. Krit. Rev. Ins. Deutsch. 2. 75 (1806); Jrn. Nouv. Méth. Hym. 91–3 no. 4 Pf. 2.4, 7.4 (1807) F.G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882); Viereek US. Nat. Mus. Bull. 83. 138, 182 (1914).

"Ordo III. Abdomine petiolato: petiolo pone thoracem infixo" (Jrn. Erl. Litt-Ztg. 1, 163-5 no. 1-48).

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III. ICHNEUMON (L.) Jrn. Erl. Litt-Ztg. 1, 163.

"Gen. 1 Ichneumon-Ichneumon."

[i. e. ICHNEUMON L. Syst. Nat. (ed. 10) 1. 343 no. 214, 560-8 no. 215 sp. 1-69 (1758); F. Ent. Syst. 2. pp. iv, 132-92 no. 140 sp. 1-246 (1793): Sppl. 219-32 (1798)—persuasorius L.; comitator L.; uctatorius L.; manifestator L.; etc.].

ICHNEUMON L. (1758)

= ICHNEUMON L. (1746) MN.; = RHYSSA Gravenh. (1829).

Type 1: Ichneumon persuasorius L. (Lmk. 1801).

ICHNEUMON L. [Fn. Suec. (ed. 1) 289–97 sp. 951–87 (1746) MN.] Syst. Nat. (ed. 10) 1. 343 no. 214, 560–8 no. 215 sp. 1–69 (1758) [14. luctatorius L.; 17. persuasorius L.; 23. comitator L.; 30. manifestator L.; etc.]: Fn. Suec. (ed. 2). [41–2], 397–411 sp. 1578– 1647 (1761): Syst. Nat. (ed. 12) 1 (2). 539, 930–41 no. 244 sp. 1–77 (1767); Blmbeh. HB. Naturg, 1. 379 no. 56 sp. 1–2 (1779); Leske Anfangs. Naturg, 519–20 no. 56 sp. 1–4 (1779, 1784); F. Ent. Syst. 2. pp. iv, 132–92 no. 140 sp. 1–246 (1793): Sppl. 219–32 (1798); Pzr. Fn. Ins. Germ. 19·16–21 (1794): 45·14–15, 47·19 (1797): 52·1–2 (1798): 70·21, 71·11–17, 72·3–5 (1799): 73·11–15, 76·12, 78·8–14, 79·8–14, 80·7–15 (1800), 81·13, 83·13, 84·14–15 (1801): 92·5–7, 94·13–14 (1804): 98·14, 100·11–12, 102·14 (1809); Ltr. Préc. Car. Ins. 112–113 no. 11 (1796); Lmk, Syst. An. sans. Vert. 265 no. 119

(1801)—[Type: persuasorius L.]: Jrn. Erl. Litt-Ztg. 1. 163 no. 1
(1801); Ltr. HN. Crust-Ins. 3. 319-27 (1802): 13. 178-88 no. 337 sp. 1-36 Pf. 100·2-3 (1804-5): Nouv. Dict. HN. 24. Tbl. Méth. 174-5 no. 382 (1804); F. Syst. Piez. pp. ix, 54-69 no. 9 sp. 1-85 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 57-67 (1806); Jrn. Nouv. Méth. Hym. 98-113 no. 1 Pf. 3⁻¹, 8⁻¹ (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882).

Type 2: Ichneumon bidentatorius F. (Crt. 1828).

**ICHNEUMON* Crt. Br. Ent. 5. expl. Pl. 234 (1828)—[Type: bidentatorius F.]; Viereek US. Nat. Mus. Bull. 83. 75 (1914).

[This species was not an original Type of the genus.]

Type 3: Ichneumon comitator L. (Crt. 1829; Wstwd. 1840).

*ICHNEUMON (L.) Crt. Br. Ent. 16. expl. Pl. 728 (1829)— [Type: comitator L.]; Wstwd. Syn. Gn. Br. Ins. 57 (1840); Viercek US. Nat. Mus. 83. 75, 165 (1914).

Type 4: Ichneumon luctatorius L. (Ashm. 1900).

**ICHNEUMON* (L.) Ashm. Pr. US. Nat. Mus. 23, 17, 175 no. 40 (1900)—Type : luctatorius L.; Viereck US. Nat. Mus. 83, 75 (1914).

[nec. *ICHNEUMON (L.) Ltr. Cons-Gén. Crust-Ins. 299–300, 436 no. 401 (1810); Viereek US. Nat. Mus. Bull. 83. 52, 75, 117, 174 (1914)—Type: manifestator L. [PIMPLA F. (= Ephialtes Gravenh.)]

Viereck (1914) accepts manifestator L. as the Type of Ichneumon L., following Latreille (1810), he however overlooks Lamarck (1801) who had already cited persuasorius L. as the Type—neither manifestator L. nor persuasorius L. belong to the genus Ichneumon, nor even to the Ichneumoninae of modern authors! Both are Pimplinae: manifestator L. an Ephialtes Gravenh., and persuasorius L. a Rhyssa Gravenh.—the latter therefore is synonymous with Ichneumon L.

Viereck sinks *Pimpla* F. as synonymous with *Ichneumon* L., but as *manifestator* L. is now shown not to be the earliest cited type of *Ichneumon* L., *Pimpla* F. becomes available for *manifestator* and *Ephialtes* Gravenh. will sink as a synonym. It is evident that the whole question will require very careful study by those interested in the *Ichneumonidae* since the facts to which attention is directed in the present paper appear to affect the validity of such important generic names as *Ichneumon, Cryptus, Pimpla*, etc., Auctt., and also of the groups higher than generic which have been named from them.

III². ANOMALON Jrn. Erl. Litt-Ztg. 1. 163. "Gen. 2 Anomalon—Ichneumon."

ANOMALON Pzr. (1804)

= ANOMALON Jrn. (1801) LN.

Type: Anomalon cruentatus Pzr. (Pzr. 1804).

ANOMALON Pzr. [Jrn. Erl. Litt-Ztg. 1. 163 no. 2 (1801) LN.]; Pzr. Fn. Ins. Germ. 94:15 (1804)—[Type: cruentatus Pzr.]: 95:13 (1804)—[alvearius F. (= aphidum Pzr.)]: Krit. Rev. Ins. Deutsch. 2. 67, 72, 75, 84, 88 (1806); Jrn. Nouv. Méth. Hym. 114-16 no. 2 Pf. 3:2, 8:2 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882).

[nec *ANOMALON (Jrn.) Crt. Br. Ent. 5. expl. Pl. 198 (1828); Viereck US. Nat. Mns. Bull. 83. 12, 46, 172 (1914)—Type: taetatorius F. (Crt. 1828) (BASEUS F.)]

Viereck (1914) follows Curtis who cited *lactatorius* F. as the Type of Anomalon Jrn. (1807) in 1838. This species was included by Jurine in his section 1, while cruentatus Pzr. and alvearius F. (= aphidum Pzr.), the types of Anomalon Pzr., 1804, were included by Jurine in his section 2. Curtis had overlooked the earlier use of Anomalon by Panzer, in Faun. Ins. Germ.—either crucntatus Pzr., or alvearius F. must be taken as Type of Anomalon Pzr. (= Anomalon Jrn., sect. 2)—cruentatus Pzr. was the first species associated with the generic name Anomalon, which on the publication of Panzer's 94.13 was a "monobasic" genus.

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HII.3. BRACON Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 3 Bracon-Ichneumon desertor, denigrator."

BRACON Jrn. (1801)

Type: Ichneumon desertor L. (Crt. 1825; Wstwd. 1840).

BRACON Jrn. Erl. Litt-Ztg. 1. 163 no. 3 (1801)—[I. desertor, L., F.; 2. denigrator F.]; F. Syst. Piez. pp. ix, 102–10 no. 12 sp. 1–40 (1804); Pzr. Fn. Ins. Germ. 92.8 (1804); Krit. Rev. Ins. Deutsch. 72, 75–8 (1806); Jrn. Nouv. Méth. Hym. 117–18 no. 3 Pf. 3:3, 8:3 (1807); Ltr. Cons-Gén. Crust-Ins. 300–1, 436 no. 403 (1810); Crt. Br. Ent. 2. expl. Pl. 69 (1825)—[Type: desertor L.]; Wstwd. Syn. Gn. Br. Ins. 64 (1840); F.G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882); Viereck US. Nat. Mus. Bull. 83. 23, 166 (1914).

Fabricius (*teste* Jurine Nouv. Méth. 117) adopted the genus and generic name *Bracon* from Jurine himself. The same is the case with several other genera introduced in the Systema Piezatorum. This being so it seems clear that Fabricius either had the Erlangen Article before him, or

had seen (like Panzer) Jurine's actual text and plates before he published the genus Bracon in the Systema Piezatorum (1804). This would sufficiently explain the compliment paid to Jurine by Fabricius on p. vi (Syst. Piez.) by placing him, even dubiously (" forte "), in the highest rank " heroes " of scientific authors (vide ante, p. 355).

Curtis cited desertor L. as the Type of Bracon Jrn. in 1825; this citation has been accepted by Westwood. 1840. and Viereck 1914.

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III 4. §POMPILUS (F.) Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 4 Pompilus-Pompilus Supplem. Evania punctum."

[i e POMPILUS F. Sppl. Syst. Ent. 212, 246-52 sp. 1-37 (1798), and Evania punctum F. Ent. Syst. 2. 194 sp. 6 (1793)-thirty-eight species including viaticus F.]

PSAMMOCHARES Ltr. (1802)

= PSAMMOCHARES Ltr. (1796) MN.; = § POMPILUS F. (1798).

Type: Sphex viatica L. (Ltr. 1802, 1810).

PSAMMOCHARES Ltr. [Préc. Car. Ins. 115–6 no. 16 (1796) MN.] = POMPILUS F. Sppl. Ent. Syst. 212, 246–52 sp. 1–37 (1798) [4. viatica L., etc.]; Pzr. Fn. Ins. Germ. 65 15-17, 71 19, 72 8-9 (1799): 76·16–17, 77·12–13, 80·17 (1800): 81·15, 84·19–20 (1801): 86·10–12, 87·21 (1804): 106·12 (1809); Jrn. Erl. Litt-Ztg. 1. 163 no. 4 (1801). §POMPILUS F. (= PSAMMOCHARES Ltr. MN.) Ltr. H.N. Crust-Ins. 3. 334-5 (1802)—[Type: viatica L., F.]: 13. 279-83 no. 378 sp. 1-9 (1804-5): Nouv. Dict. HN. 24. Tbl. Méth. 180 no. 422 (1804); Pzr. Krit. Rev. Ins. Deutsch. 110, 112-19, 120, 188, 191 (1806); Jrn. Nouv. Méth. Hym. 119-22 no. 4 Pf. 3.4, 8.4 (1807); Ltr. Cons-Gén. Crust-Ins. 317, 437 no. 464 (1810); Crt. Br. Ent. 5. expl. Pl. 238 (1828); Fox Ent. News 12. 267-8 (1901).

[\$Pompilus F. (1798) is homonymous with **Pompilus** Schneid. (1784) Ceph.]

Psammochares Ltr. (Préc. Car. Ins., 1796) was published without exponents, but in 1802 (Crust-Ins. 3. 335) Latreille sunk *Psammochares* as a synonym of *Spompilus* F., citing viatica L., F., as the Type. Psammochares then received as an exponent viatica L., and since §Pompilus F. has been found to be invalid as a homonym, its earliest synonym has been revived to replace it.

Latreille having indicated viatica L. as the Type of Psammochares Ltr., Sustera [Verh. ZB. Ges. Wien 62:1912 Abh. 210 (1912)] cannot be followed in making plumbeus F. the Type of *Psammochares* Ltr., nor in referring viatica L., F. to a different genus (viz. Anoplius Lep.).

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III.5. SPHEX (L.) Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 5. Sphex-Sphex."

[*i. e.* SPHEX L. Syst. Nat. (ed. **10**) **1**. **343**, 569–72 no. 216, sp. 1–25 (1758); F. Ent. Syst. **2**. pp. vi, 198–220 no. 143 sp. 1–92 (1793)— sabulosa L., *etc.*]

SPHEX L. (1758)

= AMMOPHILA Kby. (1798) $= \dagger AMMOPHYLUS$ (Kby.) Ltr. (1802). Type: Sphex sabulosa L. (Blmbch. 1779; Lmk. 1801; Ltr. (1804).

SPHEX L. Syst. Nat. (ed. 10) 1. 343 no. 215, 569-72 no. 216 sp. 1-25 (1758): Fn. Suee. (ed. 2) [42], 411-4 sp. 1648-64 (1761): Syst. Nat. (ed. 12) 1 (2). 539, 941-7 no. 245 sp. 1-38 (1767); Blmbeh. HN. Nat. Ges. 1. 379-80 no. 57 sp. 1-2 (1779)-[Type: sabulosa L.]; Leske Anfangs. Naturges. 520-1 no. 57 (1779, 1784); F. Ent. Syst. 2. pp. vi, 198-220 no. 143 sp. 1-92 (1793); Ltr. Prée. Car. Ins. 115 no. 15 (1796). AMMOPHILA Kby. Tr. Linn. Soc. Lond. **4.** 195–210 Pf. **19**[.]1 (1798)—[Type: **sabulosa** L.]. SPHEX F. Sppl. Ent. Syst. 211–12, 243–5 (1798); Pzr. Fn. Ins. Germ. **51**[.]3–4, **52**[.]22–4, **53**[.]1–2 (1798): **65**[.]12–14, **72**[.]7 (1799): **76**[.]15, **80**[.]16 (1800): 100.18 (1809); Lmk. Syst. An. sans Vert. 269-70 no. 128 (1801) --[Type: sabulosa L.]; Jrn. Erl. Litt-Ztg. 1, 163 no. 5 (1801); Ltr. HN. Crust-Ins. 3, 332-3 (1802): 13, 292-4 no. 390 sp. 1-3 (1804-5); Ltr. Nouv. Diet. HN. 24. Tbl. Méth. 180, 199 no. 424 (1804)-[Type: sabulosa L.]; F. Syst. Piez. pp. xii, 205-7 no. 35 sp. 1-4 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 122-4, 220 (1806); Jrn. Nouv. Méth. Hym. 125-9 no. 5 Pf. 3.5, 8.5 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 393 (1882). AMMOPHILA Ltr. Gn. Crust-Ins. 4, 53-5 no. 480 (1809): Cons-Gén. Crust-Ins. 318. 437 no. 467 (1810). SPHEX H.T.Frnld. Ent. News 16. 163-6 (1905); Kohl Ann. KK. Hofmus. Wien 21:1907 228-9 (1907).

[nec *SPHEX Ltr. Gn. Crust-Ins. 4. 55-6 no. 481 (1809): Cons-Gén. Crust-Ins. 318, 438 no. 468 (1810)—flavipennis F. (CHLORION Ltr.)].

The Type of Sphex L. was fixed as sabulosa L., F., by Blumenbach (1779), Lamarck (1801), and Latreille (1802, 1804), but subsequently (in 1809 and 1810) Latreille proposed to reverse what he and others had already decided, specifying sabulosa (L.), F. as the Type of Ammophila Kirby, and flavipennis F. as the Type of Sphex L.—but flavipennis was a Fabrician species unknown to Linné and therefore not a possible type of Sphex L. Dr. H. T. Fernald [Ent. News 16, 165 (1905)] has pointed out that Ammophila Kby, must sink as a synonym of Sphex L., the Type of both being sabulosa L., and that consequently "the subfamily Ammophilinae will become the Sphecinae"—Chlorion Ltr., should replace *Sphex Auctt. This view is opposed by Kohl (1906), but we think that Fernald proves his case,

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III.6. PSEN Jrn. Erl. Litt-Ztg. 1. 163. "Gen. 6 Psen—Sphex atra."

PSEN Jrn. (1801)

= PSEN Ltr. (1796) MN.; = MIMESA Shuck (1837) = DAHLBOMIA Wissm. (1849) = *PELOPOEUS (p.) F.

Type 1: Sphex atra F. (Jrn. 1801; Ltr. 1802, 1804–5, etc.).

PSEN Jrn. [Ltr. Préc. Car. Ins. 122–3 no. 24 (1796) MN.]; Jrn. Erl. Litt-Ztg. 1. 163 no. 6 (1801)—[Type: atra F.]; Ltr. HN. Crust-Ins. 3. 338 (1802)—[Type: atra F.]: 13. 309–10 no. "eccexci" sp. 1 (1804–5); Nouv. Dict. HN. 24. Tbl. Méth. 180, 199 no. 435 (1804); Pzr. Fn. Ins. Germ. 96-17 (1804); 98-15 (1809); Krit. Rev. Ins. Deutsch. 2. 10, 107–10 (1806); Jrn. Nouv. Méth. Hym. 135–7 no. 6 Pf. 3·6, 8·6 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 393 (1882); Ltr. Gn. Crust-Ins. 4. 91–2 no. 507 (1809): Cons-Gén. Crust-Ins. 322, 438 no. 479 (1810); Crt. Br. Ent. 1. expl. Pl. 25 (1824)—[Type: atra F. (= compressiornis F., Crt.)]; Wstwd. Syn. Gn. Br. Ins. 79 (1840); Kohl Ann. KK. NH. Hofmus. Wien 11. 289–93 no. 9 tf. 9–10 (1896).

Jurine in the Erlangen List (1801) gave "*Sphex atra* F." as the exponent of *Psen*, anticipating Latreille's citation of the same species as Type, in 1802.

Kohl has examined Jurine's Types of *Psen serraticornis* Jrn. Pf. **8**.7 \mathcal{J} , and *Psen atrata* \mathcal{Q} , and states [MT. Schweiz. Ent. Ges. **6**. 393 (1882)] that these are sexes of the same species—*Dahlbomia atra* F. Jurine was of the same opinion, for (Nouv. Méth. Hym. 137) he suggested that *compressicornis* F. (= *serraticornis* Jrn. Pf. **8**.7) and *atra* F., Pzr. (*atratum* F., Jrn. \mathcal{Q}) should be united.

In 1896, Kohl (Ann. KK. Hofmus. Wien **11**. 289–95) discusses the genera *Psen* and *Psenulus*, adopting *Psen* for *atra* F. and *Psenulus* for *Psen* Auett.

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III.7. STIGMUS Jrn. Erl. Litt-Ztg. 1, 163.

"Gen. 7 Stigmus."—[Published without description and without types—a mere logonym.]

STIGMUS Pzr. (1804)

= STIGMUS Jrn. (1801) LN.

Type: Stigmus pendulus Pzr. (Pzr. 1804).

STIGMUS Pzr. [Jrn. Erl. Litt-Ztg. 1. 163 no. 7 (1801) LN.]: Pzr. Fn. Ins. Germ. 86.7 (1804)—[Type: pendulus Pzr.]: Krit. Rev. Ins. Deutsch. 2, 271 (1806); Jrn. Nouv. Méth. Hym. 138-9 no. 7

Pf. 3^{.7}, 9^{.7} (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 393 (1882); Ltr. Gn. Crust-Ins. 4, 84 no. 502 (1809).

[nec *STIGMUS Ltr. Cons. Gén. Crust-Ins. 325, 438 no. 491 (1810)—Type: minutus F. (DIODONTUS Crt.).]

Stigmus was first introduced in the Erlangen List (1801), but without exponents, and did not become validated until 1804, when Panzer (Fn. Ins. Germ. 86.7) published "Stigmus pendulus Mihi," without eiting any author for Stigmus it seems therefore that Panzer must be treated as author and the genus as "monobasic." In the following year (1806—Krit. Rev. 271) Panzer stated that he no longer possessed a specimen of Stigmus pendulus and therefore could say nothing about its mouth-characters—a full description was furnished by Jurine in 1807. Latreille, in 1810, cited Pemphredon minutus F. as the type of Stigmus —but this was not an original type, nor was it congeneric with pendulus, being in fact a Diodontus Crt.

23

III.8. APIUS Jrn. Litt-Ztg. 1. 163. "Gen. 8 Apius—Sphex figulus."

APIUS Jrn. (1801)

= TRYPOXYLON Ltr. (1796) MN.

Type: Sphex figulus F. (Jrn. 1801; Ltr. 1802).

APIUS Jrn. [= TRYPOXYLON Ltr. Préc. Car. Ins. 121–2 no. 23 (1796) MN.]. APIUS Jrn. Erl. Litt-Ztg. 1. 163 no. 8 (1801)— Type: figulus F.] TRYPOXYLON Ltr. HN. Crust. Ins. 3. 338–9 (1802) --[Type: figulus F.]: 13. 310 no. "ceexcxii" sp. 1 (1804–5); Nouv. Dict. HN. 24. Tbl. Méth. 180–1, 199 no. 436 (1804); F. Syst. Piez. pp. ix, 180–2, no. 29 sp. 1–6, Ind. 29 (1804); Pzr. Krit. Rev. Ins. Germ. 2. 106–7 (1806). APIUS Jrn. Nouv. Méth. Hym. 140– 2 no. 8 Pf. 3.8, 9.8 (1807). TRYPOXYLON Ltr. Gn. Crust-Ins 4, 75–6 no. 497 (1809): Cons-Gén. Crust-Ins. 323, 438 no. 487 (1810).

The two genera *Apius* Jrn. and *Trypoxylon* Ltr. are absolute synonyms and *Apius* being the first published with a type must be adopted.

24

111.9. LARRA (F.) Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 9 Larra-Larra."

[*i.e.* LARRA F. Ent. Syst. 2. 220–2 no. 144 sp. 1–7 (1793) founded on seven species, including sp. 4 anathema Rossi (= *ichneumoniformis* F.)]

LARRA F. (1793)

Type: Sphex anathema Rossi (= ichneumoniformis F.; Ltr. 1802, 1810).

LARRA F. Ent. Syst. 2. pp. v. 220–2 no. 144 sp. 1–7 (1793)—[seven species including anathema Rossi (= ichneumoniformis F.)]; Ltr. Préc. Car. Ins. 116 no. 17 (1796); F. Sppl. Ent. Syst. 252–3 (1798); Jrn. Erl. Litt-Ztg. 1. 163 no. 9 (1801); Pzr. Fn. Ins. Germ. 76·18 (1800), 89·13 (1804), 106·13–17 (1809); Ltr. HN. Crust-Ins. 3. 335–6 (1802)—[Type: anathema Rossi (= ichneumoniformis F., Ltr.]: 13. 295–7 no. 393 sp. 1–2 (1804–5): Nouv. Dict. HN. 24. Tbl. Méth. 180 no. 427 (1804); F. Syst. Piez. pp. xi, 219–22 no. 38 sp. 1–14, Ind. 17–18 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 127–9, 129 (1806); Jrn. Nouv. Méth. Hym. 143–5 no. 9 Pf. 3·9, 9·9 (1807); Ltr. Gn. Crust-Ins. 4. 70–1 no. 491 (1809): Cons-Gén. Crust-Ins. 322, 438 no. 482 (1810); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 393 (1882).

25

III·10. DIMORPHA Jrn. Erl. Litt-Ztg. 1, 163. "Gen. 10 Dimorpha—Tiphia abdominalis Panzer."

DIMORPHA Jrn. (1801)

= ASTATA Ltr. (ASTATUS Ltr.) (1796) MN.

Type: Sphex boops Schrk. (= abdominalis Pzr.; Jrn. 1801; Ltr. 1802–10).

DIMORPHA Jrn. [= ASTATA Ltr. Préc. Car. Ins. pp. xiii (AsTATUS Ltr.) 114-5 (1796) MN.]. DIMORPHA Jrn. Erl. Litt-Ztg. 1. 163 no. 10 (1801)—[Type: boops Schrk. (= abdominalis Pzr.; Jrn.)]. ASTATA Ltr. H.N. Crust-Ins. 3. 336-7 (1802)—[Type: boops Schrk. (= abdominalis Pzr.; Ltr.)]: 13. 297 no. 394 sp. 1 (1804-5): Nouv. Dict. HN. 24. Tbl. Méth. 180, 199 no. 428 (1804), DIMORPHA Pzr. Krit. Rev. Ins. Deutsch. 2. 10, 126-7 (1806); Jrn. Nouv. Méth. Hym. 146-7 no. 10 Pf. 3:10, 9:10 (1807)—[Type: boops Schrk. (= $\varphi abdominalis$ Pzr., Jrn.; \Im = ocularis Jrn. Pf. 9:10) (1807)]; Pzr. Fn. Ins. Germ. 107:13 (1809). ASTATA Ltr. Gn. Crust-Ins. 4. 67-9 no. 490 (1809): Cons-Gén. Crust-Ins. 322, 438 no. 480 (1810).

The case of this genus is exactly parallel to that of Apius and Trypoxylon. The name Astata (or Astatus) was published without exponents by Latreille in 1796, before Jurine's genus Dimorpha, founded on "Tiphia abdominalis" [i.e. boops Schrk.] in May 1801. Panzer (Fn. Ins. Germ.) was the first author to associate species with Astatus,* also in the year 1801, viz. troglodyta F. (83°12), tabidus F., and spinipes Pzr. (85°11), satyrus Pzr. and

* Jurine (nec Latreille)—i.e. the Sawfly, not the Fossor, vide pp. 393-4.

pygmaeus F. (85·12)—these plates with their accompanying text were issued in Jahrgang 7 (Hefts 73-84), the preface of which is dated 3 September 1801. The date of Heft 83 may be assumed to be July 1801; Heft 85 was also issued in 1801. In 1802 Latreille designated **boops** Schrk. (= abdominalis Pnzr., Ltr.) as the type of Astata Ltr., but Dimorpha Jurine had already been published with the same type some months earlier, in May 1801 and the name Dimorpha employed by Panzer (Krit Rev.) and Jurine (Nouv. Méth. Hym.) should be adopted.

[nec ASTATUS Jrn. (1801) (nec Ltr.) with the Type pygmaeus L. vide ASTATUS Jrn. ante, p. 383.]

$\mathbf{26}$

III¹11. **TIPHIA** (F.) Jrn. Erl. Litt-Ztg. **1**, 163. "Gen. 11. Tiphia—Tiphia."

[*i.e.* TIPHIA F. Ent. Syst. 353-4 no. 110 sp. 1-8 (1775)—founded on eight species including 1. femorata F.]

TIPHIA F. (1775)

Type: Tiphia femorata F. (Ltr. 1802; 1810) [? = villosa F.; Lmk. 1801].

TIPHIA F. Syst. Ent. [25], 353-4 no. 110 sp. 1-8 (1775)--[1. femorata F., etc.]: F. Ent. Syst. 2. pp. v, 223-8 no. 145 sp. 1-29 (1793); Ltr. Préc. Car. Ins. 117-18 no. 18 (1796) MN.; Pzr. Fn. Ins. Germ. 47:20 (1797): 53:3-6, 55:1 (1798): 77:14, 81:14 (1800); F. Sppl. Syst. Ent. 254-5 (1798); Lmk. Syst. An. sans Vert. 269 no. 126 (1801)--[Type: villosa F. (? = femorata F.)]; Jrn. Erl. Litt-Ztg. 1. 163 no. 11 (1801); Ltr. HN. Crust-Ins. 3. 348-9 (1802)--[Type: femorata F. -- Ltr. includes also maculata F. which was not a type]: 13. 267-8 no. 372 sp. 1-3 (1804-5): Ltr. Nouv. Diet. HN. 24. Tbl. Méth. 179 no. 416 (1804): F. Syst. Piez. pp. viii, 232-5 no. 42 sp. 1-23, Ind. 28-9 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 133 (1806); Jrn. Nouv. Méth. Hym. 148-9 no. 11 Pf. 3:11, 9:11 (1807); Ltr. Gn. Crust-Ins. 4. 116-7 no. 520 (1809): Cons-Gén. Crust-Ins. 315, 437 no. 455 (1810)--[Type: femorata F.]]

Lamarck [Syst. An. sans Vert. 369 (1801)] selected *Tiphia villosa* F. as the Type of *Tiphia* F.—this was not one of the original types, unless, as seems probable, it can be identified as the \mathcal{S} of the well-known *femorala* F., which was cited as the Type by Latreille in 1802 (HN. Crust-Ins. 3. 348–9), and 1810 (Cons. Gén. 437)—femorata was one of the original species and must be accepted as the Type.

[Tiphia villosa is said to have abdomen nigrum, immacu-

latum, scanty pilosity, and to be of the size of femorata. A \Im specimen, named by Fabricius himself as *Tiphia villosa*, was seen by Latreille and is stated by him to differ from femorata only in the colour of the legs. This makes it certain that Saussure and Sichel were mistaken in applying the name villosa F. to a species of *Elis*.]

27

III¹2. Scolla (F.) Jrn. Erl. Litt-Ztg. 1. 163. "Gen. 12 Scolia—Scolia."

[i.e. SCOLIA F. Syst. Ent. [26], 355-6 no. 111 sp. 1-10 (1775)founded on ten species including 3 flavifrons F. and 8 quadripunctata F.].

SCOLIA F. (1775)

Type 1: Scolia flavifrons F. (= hortorum F., Ltr. 1802; ?= haemorrhoidalis F., Lmk. 1801).

SCOLIA F. Syst. Ent. [26], 355–6 no. 111 sp. 1–10 (1775)–[3 flavifrons F.; 8 quadripunctata F., and eight other species]: Ent. Syst. 2. pp. vi, 228–38 no. 146 sp. 1–38 (1793): Sppl. Ent. Syst. 255–7 (1798); Pzr. Fn. Ins. Germ. 3[,]22 (1793): 62[,]13–14, 66[,]18 (1799); Lmk. Syst. An. sans Vert. 269 no. 127 (1801) – [Type: haemorrhoidalis F. (? = flavifrons F.)]; Jrn. Erl. Litt-Ztg. 1. 163 no. 12 (1801); Ltr. HN. Crust-Ins. 3. 347 (1802)–[Type: flavifrons F. (= hortorum F., Ltr.)]: 13. 273–6 no. 376 sp. 1–5 (1804–5): Nouv. Dict. HN. 24. Tbl. Méth. 180 no. 420 (1804); F. Syst. Piez. pp. xii, 238–45, Ind. 25–6 no. 44 sp. 1– 39 (1804); F. Syst. Piez. pp. xii, 238–45, Ind. 25–6 no. 44 sp. 1– 39 (1804); F. Krit. Rev. Ins. Deutsch. 2. 11, 137–40, 220 (1806); Jrn. Nouv. Méth. Hym. 155–8 no. 12 Pf. 3[,]12, 9[,]12 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 394 (1882); Ltr. Gn. Crust-Ins. 4. 105–7 no. 513 (1809).

Type 2: Scolia quadripunctata F. (Ltr. 1810).

SCOLIA (F.) Ltr. Cons-Gén. Crust-Ins. 316, 437 no. 459 (1810)— [Type: quadripunctata F.].

Lamarck, in January 1801 (Syst. An. sans Vert. 269) selected *Scolia haemorrhoidalis* F. as the Type of *Scolia* F. This is a well-known form, but was not one of the original types, unless with Dalla Torre we regard it as a variety of the common **Scolia flavifrons** F. (= *hortorum* F.). Latreille, in 1802 (HN. Crust. Ins. 3. 346) cited as Type : flavifrons F. (= *hortorum* F., Ltr.)—his Type being therefore congeneric and very probably conspecific with Lamarck's.

In 1810, Latreille (Cons. Gén. 437) selected another species, *quadripunctata* F. as Type, but this later citation can have no effect as the type of *Scolia* was already fixed.

28

III-13. SAPYGA (Ltr.) Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 13 Sapyga—Scolia Prisma."

[i. e. SAPYGA Ltr. Préc. Car. Ins. 134-5 no. 37 (1796) MN.]

SAPYGA Jrn. (1801)

= SAPYGA Ltr. (1796) MN.; = HELLUS F. (1804).

Type 1: Apis clavicornis L. (= prisma F.; Jrn. 1801).

SAPYGA Jrn. [Ltr. Préc. Car. Ins. 134–5 no. 37 (1796) MN.]; Jrn. Erl. Litt-Ztg. 1. 163 no. 13 (30. V. 1801)—[Type: clavicornis L. (= prisma F.; Jrn.)]; Ltr. HN. Crust-Ins. 13. 271–3 no. 375 sp. 1–2 (1804–5); Klug Mon. Siric. Germ. 57–64 sp. 1–2 Pf. 7:4–8, 8:31–8 (1803). *HELLUS* F. Syst. Piez. pp. xiii, 246–7 no. 45 sp. 1–3 (1804)—[Type: clavicornis L. (= prisma F.)]. SAPYGA Pzr. Fn. Ins. Germ. 87:19–20 (1804): 100:17, 106:18 (1809). *HELLUS* Pzr. Krit. Rev. Ins. Deutsch. 2. 140–2 (1806). SAPYGA Jrn. Nouv. Méth. Hym. 159–61 no. 13 Pf. 3:13, 9:13 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 394 (1882); Ltr. Gn. Crust-Ins. 4. 108–9 no. 514 (1809).

Type 2: Scolia quinquepunctata F. (Ltr. 1802).

SAPYGA Ltr. HN. Crust-Ins. **3.** 346 (1802)—[Type: quinquepunctata F.]: **13.** 271–3 no. 375 sp. 1–2 (1804–5): Nouv. Dict. HN. **24.** Tbl. Méth. 180, 199 no. 419 (1804): Cons-Gén. Crust-Ins. 316, 437 no. 460 (1810)—[Type: quinquepunctata F. (= sexpunctella F., Ltr.)]

The name Sapyga was first published in 1796, by Latreille, but without exponents. In 1801 the Erlangen List appeared and Sapyga was validated by Jurine's citation of clavicornis L. (= prisma F., Jrn.). Latreille, in 1802 (HN. Crust-Ins. 3.), and in 1804 (Nouv. Dict.) specified quinquepunctata F. as Type, and again in 1810 he cited the same species as Type under the name "Hellus sexpunctatus F."—but as all Latreille's citations are subsequent to the Erlangen List clavicornis L. must be accepted as the Type.

29

III·14. M¥RMOSA (Ltr.) Jrn. Erl. Litt-Ztg. 1. 164.
 "Gen. 14 Myrmosa—Hylaeus thoracicus."
 [i. e. MYRMOSA Ltr. Préc. Car. Ins. 118 no. 19 (1796) MN.]

MYRMOSA Jrn. (1801)

= MYRMOSA Ltr. (1796) MN.

Type 1: Tiphia ephippium F. (= thoracicus F.; Jrn. 1801). MVRMOSA Jrn. [Ltr. Préc. Car. Ins. 118 no. 19 (1796) MN.];

Jrn. Erl. Litt-Ztg. 1. 164 no. 14 (1801)—[Type: ephippium F. (=thoracicus F.; Jrn.)]; Pzr. Fn. Ins. Germ. 85'14 (1804): Krit. Rev. Ins. Deutsch. 2. 10, 136-7 (1806); Jrn. Nouv. Méth. Hym. 162-3 no. 14 Pf. 3'14, 9'14 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 394 (1882); Ltr. Gn. Crust-Ins. 4. 119-20 no. 523 (1809): Cons-Gén. Crust-Ins. 314, 437 no. 452 (1810)—[Type: ephippium F.].

Type 2: Mutilla melanocephala F. (= nigra Rossi; Ltr. 1802).

MYRMOSA Ltr. [Préc. Car. Ins. 118 no. 19 (1796) MN.]: HN. Crust-Ins. 3. 349–50 (1802)—[Type: melanocephala F. (= nigra Rossi; Ltr.)]: 13. 266–7 no. 371 sp. 1 (1804–5)—[Type: melanocephala F.]: Nouv. Dict. HN. 24. Tbl. Méth. 179 no. 415 (1804).

This is another of the genera published without types by Latreille in 1796, and with Type by Jurine in the Erlangen List. Jurine, in 1801, gave as its exponent *Hylaeus thoracicus* F. only—this species is identified as **Tiphia ephippium** F. (1775) both by Dalla Torre and by André [Sp. Hym. 8. 441-2 (1899)]. Jurine in the Nouvelle Méthode figures the same species under the name **ephippium** F., and in the text gives *Hylaeus thoracicus* F. as a synonym of it—ephippium F. is therefore the Type of the genus.

Mutilla nigra Rossi, which Latreille cited as the Type in 1802, is, according to the same authorities, synonymous with the more common species melanocephala F., but Jurine's designation has priority, and was adopted by Latreille himself in 1810.

30

III. 15. VESPA (L.) Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 15 Vespa—Vespa."

[*i. e.* VESPA L. Syst. Nat. (ed. **10**) **1**. 343 no. 216, 572–4 no. 217 sp. 1–17 (1758)—founded on seventeen species, including 1. crabro L. and 2. *vulgaris* L.]

VESPA L. (1758)

Type 1: Vespa crabro L. (Lmk. 1801; Ltr. 1804, 1810).

VESPA L. Syst. Nat. (ed. 10) 1. 343 no. 216, 572-4 no. 217 sp. 1-17 (1758)—[1. crabro L., 2. vulgaris L., and 15 other species]: (ed. 12) 1 (2). 539, 948-52 no. 247 sp. 1-28 (1767); F. Ent. Syst. 2. pp. v, 253-83 no. 151 sp. 1-102 (1793); Pzr. Fn. Ins. Germ. 17:18 (1794): 47·21 (1797): 49·19-24, 53·7-10 (1798): 63·1-8, 64·12 (1800): 81·16-18 (1801); Lmk. Syst. An. sans Vert. 271 no. 131 (1801)—[Type: crabro L., F.]; Jrn. Erl. Litt-Ztg. 1. 164 no. 15 (1801); Ltr. Nouv. Dict. HN. 24. Tbl. Méth. 181, 199 no. 447 (1804)—[Type: crabro L., F.]; F. Syst. Piez. pp. xii, 253-68 no.

49 sp. 1-78, Ind. 29-30 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 148-60 (1806); Jrn. Nouv. Méth. Hym. 164-72 no. 15 Pf. 4[.]15, 9[.]15 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882); Ltr. Gn. Crust-Ins. 4. 142-3 no. 537 (1809): Cons-Gén. Crust-Ins. 330, 438 no. 504 (1810).

Type 2: Vespa vulgaris L. (Ltr. 1802, 1804).

VESPA (L.) Ltr. HN. Crust-Ins. 3. 364 (1802)—Type: vulgaris L., F.]: 13. 350-2 no. 403 sp. 1-5 (1804-5).

Lamarck's selection of Vespa crabro L. is the earliest, and unexceptionable; it was accepted by Latreille in 1804 and 1810, although previously (1802-4) he had cited Linné's second species, vulgaris L.

31

III.16. BEMBEX (F.) Jrn. Litt-Ztg. 1. 164.

"Gen. 16 Bembex-Bembex."

[*i.e.* BEMBEX F. Ent. Syst. 2. pp. vi, 247–52 no. 150 sp. 1–16 (1793)—founded, in 1775, on 1. signata L.; 2. punctata F.; 3. rostrata L.]

BEMBIX F. (1775)

= $\dagger BEMBYX$ F. (1775); $\dagger BEMBEX$ F. (1777)—[$\ddagger BEMBIX$ F.— $\beta \epsilon \mu \beta \epsilon \xi$ (a whipping-top)].

Type: Apis rostrata L. (Rossi 1790; Ltr. 1802-10).

BEMBIX F. Syst. Ent., Char. Gen. [27], no. 115 (1775). †BEMBYX F. Syst. Ent. 361-2 no. 115 sp. I-3 (1775)-[1. signata L., F.;
2. punctata F.; 3. rostrata L., F.] BEMBEX F. Gn. Ins. 122 no. 115 (1777): Sp. Ins. 1. 457-8 no. 118 sp. 1-4 (1781): Mant. Ins. 1. pp. xvi, 285-6 no. 123 sp. 1-9 (1787); Olvr. Enc. Meth. HN. 4 (Ins. 1). 286-92 sp. 1-12 (1789); Roemer Gn. Ins. L-F. 60 no. 123 Pf. 27.9-10 (1789); Rossi Fn. Etrusc. 2, 81-2 no. 123 sp. 857-9 (1790) [rostrata L., F.]; F. Ent. Syst. 2. pp. vi, 247-52 no. 150 sp. 1-16 (1793): Sppl. 259-60 (1798); Pzr. Fn. Ins. Germ. 1.10 (1793)-[rostrata L.]: 84·21-2 (1801): 86·13 (1804); Ltr. Préc. Car. Ins. 130-1 no. 33 (1796); Jrn. Erl. Litt-Ztg. 1. 164 no. 16 (1801); Ltr. HN. Crust-Ins. 3. 345 (1802)—[Type: rostrata L., F.]: 13. 299– 302 no. 395 sp. 1-2 (1804-5): Ltr. Nouv. Dict. HN. 24. Tbl. Méth. 180 no. 429 (1804); F. Syst. Piez. pp. xiii, 222-7, Ind. 4-5, no. 39 sp. 1-21 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 130-2, 220 (1806); Jrn. Nouv. Méth. Hym. 173-5 no. 16 Pf. 4.16, 10.16 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 394 (1882); Ltr. Gn. Crust-Ins. 4. 97-9 no. 510 (1909): Cons-Gén. Crust-Ins. 320, 438 no. 474 (1810)—[Type: rostrata L., F.].

[nec *BEMBEX (L.) Lmk. Syst. An. sans Vert. 272 no. 132 (1801)—signata F. (MONEDULA Ltr.)].

Rossi, in 1790 (Fn. Etrusc. 81-2), enumerated three species of *Bembex* F., only one of which, rostrata F., was an

original type. In 1793 Panzer figured and diagnosed Bembex rostrata, and in 1801 Lamarck (Syst. An. sans Vert. 272) enumerated two other species, only one of which, signata F., was an original type. We come next to Latreille's definite revision of the genus in 1802, when he separated Monedula Ltr., (n. g.), with Type carolina F., Coq. (teste Ltr. 1804) from Bembex F., citing as Type rostrata F. This is rather fortunate, for if Lamarck had definitely chosen signata as his Type it might have been necessary to call Monedula Ltr. a Bembix, and to find another name for the present genus Bembex Auctt.

32

III.17. MASARIS (F.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 17 Masaris-Masaris."

[*i. e.* MASARIS F. Ent. Syst. 2. pp. vi, 283–5 no. 152 sp. 1–2 (1793) —founded on two species, 1. vespiformis F. and 2. *dubia* Rossi (= apiformis F.)]

MASARIS F. (1793)

Type: Masaris vespiformis F. (Ltr. 1802, 1804, 1810).

MASARIS F. Ent. Syst. 2. pp. vi, 283–5 no. 152 sp. 1–2 (1793)-[1. vespiformis F.; 2. dubia Rossi (= apiformis F.)]; Pzr. Fn. Ins. Germ. 47·22 (1797): 76·19 (1800); Jrn. Erl. Litt-Ztg. 1. 164 no. 17 (1801); Ltr. HN. Crust-Ins. 3. 368 (1802)-[Type: vespiformis F.]: 13. 353 no. 404 Pf. 102·8 (1804–5): Nouv. Dict. HN. 24. Tbl. Méth. 181, 199 no. 448 (1804); F. Syst. Piez. pp. xii, 292, Ind. 18, no. 53 sp. 1 (1804); Jrn. Nouv. Méth. Hym. 182–4 no. 17. Pf. 4·17, 10·17 (1807); Ltr. Gn. Crust-Ins. 4. 144 no. 538 (1909): Cons-Gén. Crust-Ins. 330, 438 no. 505 (1810).

The Fabrician genus *Masaris* was founded on two species, vespiformis F. (from Barbary) and *apiformis* F. (from Italy). In 1802, Latreille revised the genus, restricting *Masaris* F. to vespiformis F., and proposing the new genus *Celonites* for *apiformis* F. When describing *Masaris apiformis*, in 1793, Fabricius correctly gave as a synonym *Chrysis dubia* Rossi (1790)—Rossi's name must be restored, and the species should be known as Celonites dubia Rossi (= *apiformis* F.).

Fabricius accepted Latreille's restriction, in 1804 (Syst. Piez. 292), but Jurine (Nouv. Méth. Hym. 182–4) 1807, still continued to call *apiformis* F. a *Masaris*, stating that he had not seen vespiformis F., and that he did not know whether its differences from *dubia* Rossi (= *apiformis* F.,

Jrn.) were generic—" *Masaris*" of the Erlangen List was therefore really *Celonites* Ltr. No true *Masaris* has, we believe, been recorded from Europe.

33

III·18. SIMBLEPHILUS Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 18 Simblephilus—Philanthus pictus Panzer."

SIMBLEPHILUS Jrn. (1801)

= **PHILANTHUS* (nec F.) Ltr.

Type: Vespa triangulum F. (= pictus Pzr.; Jrn. 1801).

SIMBLEPHILUS Jrn. Erl. Litt-Ztg. 1. 164 no. 18 (1801)—[Type: triangulum F. (= pictus Pzr.)]. *PHILANTHUS Ltr. HN. Crust-Ins. 3. 366-7 (1802): 13. 313-4 no. "ccexexiii" sp. 1-2 (1804-5): Nouv. Dict. HN. 24. Tbl. Méth. 181 no. 437 (1804). SIMBLEPHILUS Jrn. Nouv. Méth. Hym. 185-8 no. 18 Pl. 4:18, 10:18 (1807). *PHILANTHUS Ltr. Gn. Crust-Ins. 4. 95 no. 510 (1809): Cons-Gén. Crust-Ins. 326, 438 no. 496 (1810)—[Type: triangulum F. (= pictus Pzr.)].

The application of the generic name *Simblephilus* Jrn. is discussed under *Philanthus* F. (no. 38, pp. 408–10).

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III.19. MELLINUS (F.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 19 Mellinus-Mellinus ruficornis. Crabro U-flavum Hellwig."

[i. e. MELLINUS F. Skr. NH. Selsk. Kjobnhavn. 1. 226 no. 8 sp. 1-5 (1790): Ent. Syst. 2. pp. v, 285-8 no. 153 sp. 1-7 (1793)—founded on three species, including **arvensis** L. (= U-flavum Hlwg., Jrn.)].

MELLINUS F. (1790)

Type: Vespa arvensis L. (= U-flavum Hlwg.; = bipustulatus F.) (Ltr. 1802).

MELLINUS F. Skr. NH. Selsk. Kjobnhavn. **1.** 226 no. 8 sp. 1–5 (1790)—[arvensis L. (= 4. arvensis F.; = 5. bipustulatus F.) and two other species]: Ent. Syst. **2.** pp. v, 285–8, no. 153 sp. 1–7 (1793); Ltr. Préc. Car. Ins. 124–5 no. 26 (1796); Pzr. Fn. Ins. Germ. **53**·11–13 (1798): **72**·13–14 (1799): **73**·19, **77**·17–18, **80**·18 (1800): **98**·17–18 (1809); Jrn. Erl. Litt-Ztg. **1.** 164 no. 19 (1801)—[1. sabulosus L. (= ruficornis F., Jrn.); **2.** arvensis L. (= U-flavum Hlwg., Jrn.)]; Ltr. HN. Crust-Ins. **3**. 339 (1802)—[Type: arvensis L.]: **13**. 318–20 no. "eccexxv" sp. 1–5 (1804–5): Nouv. Dict. HN. **14**. 281–2 (1804): **24**. 181 no. **439** (1804); F. Syst. Piez. pp. viii, 297–300 no. 56 sp. **1**–13 (1804); Pzr. Krit. Rev. Ins. Deutsch. **2**. 167–9

(1806); Jrn. Nouv. Méth. Hym. 189–91 no. 19 Pf. 4[.]19, 10[.]19 (1807); Ltr. Gn. Crust-Ins. 4. 85–6 no. 503 (1809): Cons-Gén. Crust-Ins. 325, 438 no. 493 (1810).

The two species cited by Jurine as exponents of *Mellinus*, viz. *ruficornis* and *U-flavum*, are synonyms respectively of two species assigned practically by all authors to this genus, viz. *sabulosa* L., and **arvensis** L.

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III:20. ARPACTUS Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 20 Arpactus—Mellinus mystaceus, quinquecinctus."

ARPACTUS Jrn. (1801)

⁺HARPACTUS Shuck. (1837); ⁺HARPACTES Dhlb. (1843)

= CEROPALES Ltr. [1796 MN.] (1802); = GORYTES Ltr. (1804); = HopLISUS Lep. (1832).

Type 1: Sphex mystacea L. (= Mellinus mystaceus F.; Jrn.).

ARPACTUS Jrn. Erl. Litt-Ztg. 1. 164 no. 2) (1801)—[Types: 1. mystaceus L., F.; 2. quinquecinctus F.]; Pzr. Krit. Rev. Ins. Deutsch. 2. 10, 164–6 (1806); Jrn. Nouv. Méth. Hym. 192–4 no. 20 Pf. 4·20, 10·20 (1807) [1. mystaceus L.; 4. quinquecinctus F.]; F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 394 (1882). *GORYTES Ltr. Cons-Gén. Crust-Ins. 321; 438 no. 477 (1810)—[Type: mystaceus F.]; Crt. Br. Ent. 11. expl. Pl. 524 (1834).

Type 2: Mellinus quinquecinctus F. (Ltr. 1802, 1804).

CEROPALES Ltr. [Préc. Car. Ins. 123-4 no. 25 (1796) MN.]: HN. Crust-Ins. 3. 335, 339-40 (1802)—[Type: quinquecinctus F.]; Jrn. Nouv. Méth. Hym. 193 (1807). GORYTES Ltr. Nouv. Dict. HN. 4. 541 (1803-4): 24. Tbl. Méth. 180 no. 434 (1804)—[Type: quinquecinctus F.]: HN. Crust-Ins. 13. 308-9 no. "cccxcx." sp. 1-2 (1804-5). HOPLISUS Lep. Ann. Soc. Ent. Fr. 1. 61-6 sp. 1-3 (1832) —[Type: quinquecinctus F.]

[nec *CEROPALES Ltr. Nouv. Dict. HN. 24. Tbl. Méth. 180 no. 423 (1804)—[Type: maculata F.]: HN. Crust-Ins. 13. 283-4 no. 379 sp. 1-3 (1804-5): F. Syst. Piez. pp. viii, 185-7, Ind. 7, no. 31 sp. 1-9 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 110-12 (1806); Jrn. Nouv. Méth. Hym. 123-4 (1807); Pzr. Fn. Ins. Germ. 106-12 (1809); Ltr. Gn. Crust-Ins. 4. 62-3 no. 488 (1809): Cons-Gén. Crust-Ins. 317, 437 no. 465 (1810)—[Type: maculata F.]; Crt. Br. Ent. 16. expl. Pl. 736 (1839); Dalla Torre Cat. Hym. 8. 340-6 (1897)—[Type: maculata F. (HYPSICERAEUS nn.].

The genus Arpactus Jrn. was first published in the Erlangen List (1801) with two exponents mystaceus L., F., and quinquecinctus F. Ceropales Ltr. appeared in 1796 (Préc. Car. Ins.), but without included species, and was not validated until 1802, when Latreille (HN. Crust-Ins. 3) TRANS. ENT. SOC. LOND. 1914.—PARTS III, IV. (FEE.) DD

cited quinquecinctus F., associating with it a doubtful species "campestris? F." Von Dalla Torre treats campestris (L.) F. as a synonym of mystacea, but most authors have used the name for a different though closely allied species. If von Dalla Torre is right Arpactus Jrn. and Ceropales Ltr. were both founded on the same two species, and as Ceropales was not validated until after the publication of Arpactus, the latter must hold the field.

In 1804, Latreille (Nouv. Dict. HN. 24) specified Evania maculata F. as the Type of Ceropales, and proposed Gorytes as a new genus with the Type Mellinus quinquecinctus F. it is therefore evident that Ceropales Ltr. [1796 MN.] (1802) = Gorytes Ltr. (1804) the Type of both being the same species quinquecinctus F.—another synonym with the same Type is Hoplisus Lep. (1832).

In 1807, Jurine (Nouv. Meth. Hym.) added several species to his genus Arpactus, figuring one of these (Arpactus formosus) and remarking "M. Latreille avait dabord donné aux insectes de ce genre le nom de Ceropales qu'il a changé dans la suite contre celui de Goryte." Most recent authors, supposing that Gorytes was the oldest valid name for mystaceus, etc., have adopted it, but have still retained Arpactus (or Harpactus) in a restricted sense for another group which includes the Arpactus formosus figured by Jurine in Nouv. Méth. Hym. 1807 (which however was not one of the original exponents of Arpactus Jrn. 1801). But Handlirsch, who is the chief authority on this question, does not consider the differences between the groups of mystaceus, formosus, etc., to be generic or even subgeneric, and places them all in one genus, which he calls Gorytes. Of the original exponents of Arpactus 1801 (mystaceus L., F., and quinquecinctus F.), one, mystaceus, belongs to the division now commonly known as "Gorytes Ltr. (sens. strict.)," the other to Hoplisus Lep. If these are to be maintained as genera, or subgenera, the name Arpactus could be limited to either of them, since it contained an exponent of each, but not to the group of formosus, whereas the name Ceropales Ltr. (= Gorytes Ltr.) could only be applied to the section containing its original Type (i. e. to Hoplisus Lep.).

A further difficulty has been created by an extraordinary lapse of memory of Latreille, for after publishing *quinquecinctus* as a *Ceropales* in 1802, he again published it in 1804 under the name *Gorytes*, giving *maculata* as the Type of

Ceropales. In 1810 (Cons-Gén.) Latreille still cited Evania maculata F. as the Type of Ceropales Ltr., but he designated a different Type for Gorytes Ltr., viz. Mellinus mystaceus F. ! Evania maculata F. (and the species associated with it in the new Ceropales) belong to a totally different group of the Hymenoptera—these are not Sphegidae at all but Psammocharidae (Pompilidae) !

Actually therefore Latreille has erected two genera called *Ceropales*—the earlier a Sphegid, the latter a Psammocharid, and it is in the latter sense that the name is now universally employed—while two different Sphegids were cited by the same author at different times as types of *Gorytes* !

Sphex mystacea L. (= Mellinus mystaceus F.) should be adopted as the Type of Arpactus Jrn. (= *Gorytes Ltr., 1810); Mellinus quinquecinctus F. as the Type of Ceropales Ltr. 1802 (= Gorytes Ltr. 1804; = Hoplisus Lep. 1832); and Evania maculata F. as the Type of HYPSICERAEUS ($\psi \psi =$ high, $\varkappa \varepsilon \rho a (a = \text{antenna})$ nn. (= *Ceropales Ltr. 1804-10).

high, $\varkappa \epsilon \varrho a (a = antenna)$ nn. (= *Ceropales Ltr. 1804-10). [Certain precisians will doubtless insist that Shuckard's *Harpactus* is an improvement on Jurine's Arpactus, and such ought logically to go further and demand that both should give place to Dahlbom's Har-pactes. But those who would emend every scientific name which they think open to objection, as an usher corrects the mistakes in a boy's exercises, do not seem to be aware how complex and often difficult of application to special cases the so-called Laws (or rather Principles) which determined the actual formation of new words in Greek and Latin really are, and how endless will be the alterations required in our present Nomenclature if every blemish, or even such blemishes only as any intelligent schoolboy can detect, must be corrected out of hand. 'A grazzós (Arpactus) may not be good Greek, it may even be impossible, at least in the sense which Jurine meant it to bear. But a Greek would not have felt it to be otherwise than euphonious in itself: and if a neologism satisfies Greek phonetic taste, we need surely ask no more.

It might even be pleaded, that, if we accept the probably exaggerated statements of ancient grammarians, one whole large section of the Dialects which made up "classical Greek" rejected the *spiritus asper* altogether, and that in these, therefore, *Arpactus* would be right and *Harpactus* actually wrong ! But, apart from special pleading, we believe that Entomologists will generally be wise, if they are content to keep their own new names as free as possible from glaring eccentricities (e. g. the reckless combining in one word of Greek and Latin elements and inflexions), while accepting names published by older authors—unless in the case of obvious misprints—in the forms (whether philologically correct or otherwise) which were given to them when they first appeared in scientific literature from 1758 onwards.]

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III-21. ALYSSON Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 21 Alysson—Sphex fuscata. Pompilus spinosus Panzer. Pompilus tumidus Panzer."

ALYSSON Jrn. (1801)

 $= \dagger A_{L1} SON Jrn. (1807).$

Type: **Pompilus spinosus** Pzr. (Pzr. 1806; Jrn. 1807; Crt. 1836; Wstwd. 1840).

ALYSSON Jrn. Erl. Litt-Ztg. 1. 164 no. 21 (1801)—[1. spinosus Pzr. (= *fuscata [nec F.] Pzr., Jrn.; = spinosus Pzr., Jrn.) and 2. tumidus Pzr.]; Pzr. Krit. Rev. Ins. Deutsch. 2. 169–71 (1806) [Type: spinosus Pzr. (= *fuscata [nec F.] Pzr. 51·3; = bimaculataPzr. 51·4 \mathfrak{Q} ; = spinosus Pzr. 80·17 \mathfrak{Z})—tumidus Pzr. 81·15, removed to Mellinus (Pzr. 1. c. 169)]. $\dagger ALTSON$ Jrn. Nouv. Méth. Hym. 195–6 no. 21 Pf. 4·21, 10·21 (1807)—[Type: spinosus Pzr., Jrn. (= $\dagger fucata$ Jrn.)—tumidus Pzr. removed to Arpactus (Jrn. 1.c. 194)]; F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 394 (1882); Ltr. Gn. Crust-Ins. 4. 86–7 no. 504 (1809): Cons.-Gén. Crust-Ins. 325, 438 no. 494 (1810); Crt. Br. Ent. 13. expl. Pl. 584 (1836)—[Type: spinosus Pzr. (= bimaculatus Pzr.; Crt.)]; Wstwd. Syn. Gn. Br. Ins. 80 (1840)—[Type: spinosus Pzr. Jrn.].

In the Erlangen List (1801) Jurine enumerates under Alysson three exponents—Sphex fuscata, **Pompilus spinosus** Pzr. and Pompilus tumidus Pzr. In 1806, Panzer (Krit. Rev. 169–71) removed tumidus Pzr. to Mellinus, restricting Alysson to fuscatus Pzr. and spinosus Pzr., and adding bimaculatus Pzr.—fuscatus Pzr. and bimaculatus Pzr. are synonyms of spinosus Pzr. which thus became the Type.

In the Nouv. Méth. Hym., Jurine also removed *tumidus* from Alysson (\dagger Alyson) referring it to Astatus (p. 194); he united bimaculata Pzr. (51.4, \Im) and spinosa Pzr. (80. 17 \Im) as sexes of the same species; and stated that he only knew fuscata Pzr. (\dagger fucata Jrn.) from Panzer's figure (51. 3), "et que les cellules des ailes soient mal rendues dans le dessin qu'il en a donné, je placerais néanmoins cet

insecte dans ce genre "—Jurine clearly indicates that the Type of Alysson Jrn. is spinosus Pzr. \mathcal{J} (= § bimaculata Pzr. \mathcal{Q}).

Two insects have been described as "Sphex fuscata," viz. Sphex fuscata F. (1793—a Psammocharid, = rufipes L.) and "Sphex fuscata F.," Pzr. 51·3 (1799). Jurine (Nouv. Méth. Hym. p. 196) shows that he intended the latter but this *fuscata Pzr., though adopted by Handlirsch, must sink as a homonym erroneous in adoption. In 1798 Panzer described as a new species Sphex bimaculata, without reference to Sphex bimaculata Fuessly (1775) the name § bimaculata Pzr., though employed by most authors, including Curtis who cited it as the Type of Alyson in 1836, must also sink as a homonym and spinosus Pzr. (1801: Pompilus) should be taken as the name of the species.

[This Alysson spinosus Pzr. (= Pompilus spinosus Pzr., 1801) must not be confounded with the Crabro spinosus F. (1775), which is the Type of our next genus Nysson Jrn.]

Latreille (Cons. Gén., 1810) includes under Alyson, with fuscata, a further species, viz. lunicornis F. (1798: Pompilus)—but this is a Didineis.

[The original spelling of the name of the genus was Alysson (Erlangen List, 1801), not $\dagger Alyson$. In the Nouv. Méth. Hym. the name was altered to Alyson, but needlessly, not to say incorrectly, for it is evidently formed from $d\lambda \dot{v} \sigma \omega$ (to fidget), as the following name "Nysson" from $r \dot{v} \sigma \sigma \omega$ (to prick), while $\dagger d\lambda v \sigma \omega r$ is no Greek word at all.

It will be seen, from the references given below, that Nysson first appeared (without type) in the form "Nysso"! —but it is to be hoped that this was a mere misprint, and not a blundering attempt to Latinize the participle réosour.]

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III.22. Nysson Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 22 Nysson—Crabro spinosus : trimaculat. Ross. Mellin. interruptus. Fabr. Pompil. maculatus. Fabr.

NYSSON Jrn. (1801)

= †*NYSSO* Ltr. (1796) MN.

Type: Sphex spinosus Forst. (1771) F., (= tricinctus F.; Ltr. 1810).

NYSSON Jrn. $[=\dagger NYSSO$ Ltr. Préc. Car. Ins. 125-6 no. 27

(1796)]. NYSSON Jrn. Erl. Litt-Ztg. 1. 164 no. 22 (1801—[spinosus F., maculatus F., and two other species]; Ltr. HN. Crust-Ins. 3. 340 (1802): 13. 305-7 no. 398 sp, 1-4 (1804-5): Nouv. Dict. HN. 24. Tbl. Méth. 180, 199 no. 432 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 188-90 (1806); Jrn. Nouv. Méth. Hym. 197-9 no. 22 Pf. 4:22, 10:22 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 394 (1882); Ltr. Gn. Crust-Ins. 4. 90-1 no. 506 (1809); Cons-Gén. Crust-Ins. 321, 438 no. 478 (1810)—[Type: spinosus F.] (= tricinetus F., Ltr.]

The type of Nysson was designated by Latreille, in 1810, as *Mellinus tricinctus* F. (1793), which is a synonym of **Sphex spinosus** Forst. (1771) = *Crabro spinosus* F. (1775), one of the species originally included by Jurine in Nysson.

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III.23. PHILANTHUS Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 23 Philanthus—Philanthus laetus, arenarius. Crabro labiatus Fab."

[*i. e.* PHILANTHUS F. Skr. NH. Selsk. Kjobnhavn. **1**. 224–5 no. 7 sp. 1–8 (1790): Ent. Syst. **2**. 288–92 no. 154 sp. 1–13 (1793)—**arenarius** L. and five other species.]

PHILANTHUS F. (1790)

= †*PHILANTHNS* F. (1793); =†*PHILANTUS* F. (1793); =*CERCERIS* Ltr. (1802).

Type 1: Sphex arenaria L. (Jrn. 1801).

PHILANTHUS F. Skr. NH. Selsk. Kjobnhavn. 1. 224–5 no. 7 sp. 1-8 (1790)—[1. coronatus F.; 2. triangulum F. (2. triangulum F. ;= 3. diadema F.); 3.(4) rufipes F.; 4. rybyensis L. (= 5. ornata L., F.); 5. arenarius L. (6. arenarius F.; = 8. quinquecinctus F.); 6.(7) flavipes F.] $\dagger PHILANTHUS$ F. Ent. Syst. 2. p. v no. 154 (1793): $\dagger PHILANTUS$ F. Ent. Syst. 2. 288–92 no. 154 sp. 1–13 (1793): Sppl. 268–9 (1798). PHILANTHUS Ltr. Préc. Car. Ins. 133–4 no. 26 (1796); Pzr. Fn. Ins. Germ. 46-2, 47:23–4 (1797): 63:9–19, 84:23–4 (1801); Jrn. Erl. Litt-Ztg. 1. 164 no. 23 (1801)— [Type: arenarius L. (= laetus F., Jrn.; = arenarius F., Jrn.)—with which Jurine associates labiatus F.]; F. Syst. Piez. p. viii, 301–7, Ind. 22–3, no. 57 sp. 1–25 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. (171–5 (1806); Jrn. Nouv. Méth. Hym. 200–2 no. 23, ($\dagger PHILANTUS$) Pf. 4:23, 10:23 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 394 (1882). *CERCERIS Crt. Br. Ent. 6. expl. Pl. 269 (1829). [Type: arenaria L. (= laeta F., Crt.)]; Wstwd. Syn. Gn. Br. Ins. 81 (1840).

[nec *PHILANTHUS Ltr. [Préc. Car. Ins. 133-4 no. 36 (1796) MN.]: HN. Crust-Ins. 3. 366-7 (1802): 13. 313-4 no. "ccexexiii" sp. 1-2 (1804-5): Nouv. Dict. HN. 17. 397-9 (1803): 24. Tbl. Méth. 181 no. 437 (1804): Gn. Crust-Ins 4. 95 no. 510 (1809): Cons.-Gén. Crust-Ins. 326, 438 no. 496 (1810); Crt. Br. Ent. 6. expl. Pl. 273 (1829); Wstwd. Syn. Gn. Br. Ins. 81 (1840)—Type:

triangulum F. (= androgynus Rossi, Crt.) (SIMBLEPHILUS Jrn.), ante p. 402.]

Type 2: Sphex rybyensis L. (= ornatus F.; Ltr. 1810).

CERCERIS Ltr. HN. Crust-Ins 3. 367 (1802)—[1. arenarius L., F.; 2. rufipes F.; 3. rybyensis L. (= ornatus F.)]; 13. 315–8 no. "cecxcxiv." sp. 1–3 (1804–5): Nouv. Dict. HN. 4. 497–8 (1803): 24. Tbl. Méth. 181, 199 no. 438 (1804); Jrn. Nouv. Méth. Hym. 201 (1807): Ltr. Gn. Crust-Ins. 4. 93–5 no. 508 (1809): Cons-Gén. Crust-Ins. 326, 438 no. 495 (1810)—[Type: rybyensis L. (= ornatus F.)]

Philanthus, in Fabricius' original sense (1790) included (1) Philanthus Auett. (nec Jrn.); (2) Cerceris Auett. (= Philanthus Jrn.); and (3) Palarus Ltr. (= Gonius Jrn.) --this will be discussed in the note next following (vide p. 411).

The composite genus *Philanthus* F. was revised and analysed in exactly the same way by Jurine and Latreille, and both these authors retained the original name of the genus for one of its divisions, but, unfortunately, not for the same division, so that *Philanthus* has three meanings: *Philanthus* Jrn. + *Philanthus* Ltr. + *Palarus* Ltr. (= Gonius Jrn.) together make up *Philanthus* F. Jurine applied the name to the group which contained the greater number of Fabrician species—Latreille, to the group whose species stood first in Fabricius' List. *Philanthus*, as thus limited by Jurine, contains all the species with petiolate second cubital cell; of the rest, he calls one species *Gonius* and the other *Simblephilus*.

Latreille called the species with petiolate second cubital cell *Cerceris*; for *Gonius* he used *Palarus*, and for *Simblephilus* he used *Philanthus*.

Jurine's nomenclature being supposed to have first appeared in 1807 (Nouv. Méth. Hym.) has been universally held to be later than that of Latreille, and the latter has consequently been adopted. The facts however are as follows:—Jurine in the Erlangen List (1801) published Simblephilus with a single exponent Philanthus pictus Pzr. (i. e. triangulum F.)—Simblephilus Jrn., therefore, is the Philanthus of recent authors. Gonius shall be treated under the next heading.

Philanthus of the Erlangen List is published in connection with three names : *Philanthus laetus* and *arenarius*, and *Crabro labiatus* Fab.—the last of these is not an original type of *Philanthus* F., and may be disregarded nomenclatorially—it is however congeneric with the others.

Panzer has figured *laetus* (63.11) and *arenarius* (46.2) in the Fauna Ins. Germ., and the two are apparently identical, equalling *Cerceris arenaria* Auett.

Latreille, 1802 (HN. Crust. Ins. 3) characterised his *Philanthus* with coronatus F., triangulum F., and apivorus Ltr. as its exponents—(apivorus is a synonym of triangulum, and coronatus a rarer species of the same genus).

In 1802 Latreille (l.c.) characterised *Cerceris* with exponents *arenarius*, *rufipes*, and *ornatus*; in 1810 (Cons-Gén.) he definitely selected *ornatus* F. (i. e. *rybiensis* L.) as the Type of *Cerceris*.

The results appear to be as follows:—(1) Jurine's revision of *Philanthus* (30. V. 1801) being a year prior to that of Latreille (after IV. 1802), his restriction of its possible types to *laetus*, arenarius, and *labiatus*, must be accepted. This means that arenaria L. is the Type, for *laetus* is a synonym of arenarius, and *labiatus* was not originally included in the Fabrician *Philanthus*.

Rybiensis L. (= ornata F.), Latreille's own Type of Cerceris, is congeneric with arenaria L., and Cerceris Ltr. is therefore synonymous with Philanthus F., Jrn. (nec Ltr.), as noted by Jurine (Nouv. Méth. Hym. 201):—" Mr. Latreille a donné le nom de cerceris à nos philanthes, en les séparant, avec raison, des autres hyménoptères."

**Philanthus* (F.) Ltr. (*nec* Jrn.) not being available for the genus including *triangulum* F., Jurine's monotypical genus *Simblephilus* (Type : *triangulum* L.) should replace it.

The effect of the revision of *Philanthus* F. by Jurine (1801) and by Latreille (1802) may be shown thus :---

PHILANTHUS F.

Fabricius 1790 Jurine 1801 Latreille 1802 PHILANTHUS (F.) Jrn. = CERCERIS Ltr. SIMBLEPHILUS Jrn. = *PHILANTHUS (F.) Ltr. GONIUS Jrn. LN. = PALARUS Ltr.

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III·24. GONIUS Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 24 Gonius"—[a mere logonym, without exponents]. PALARUS Ltr. (1804-5)

= GONIUS Jrn. [1801 LN.]; = PALARUS Ltr. (1802) MN.; = GONIUS Pzr. (1806).

Type: Palarus auriginosus Eversm. (= * flavipes Pzr. 84.24 (nec F.); Ltr. 1804-5).

PALARUS Ltr. [= GONIUS Jrn. Erl. Litt-Ztg. 164 no. 24 (1801) LN.; = PALARUS Ltr. HN. Crust-Ins. 3. 336 (1802) MN.] PALARUS Ltr. (= GONIUS Jrn.) Ltr. HN. Crust-Ins. 13. 296 (1804-5)—[Type: auriginosus Eversm. (= * flavipes Pnzr., nec F.; Ltr.)]. GONIUS PZr. Krit. Rev. Ins. Deutsch 2. 176-8 (1806)— [Type: auriginosus Eversm. (= * flavipes Pzr., nec F.)]. PAL-ARUS Ltr. Gn. Crust-Ins. 1. expl. Pf. 14⁻¹ p. xvi (1806)—[figures auriginosus Eversm. (= * flavipes Pzr., Ltr., nec F.)]. GONIUS Jrn. Nouv. Méth. Hym. 203-5 no. 24 Pf. 4⁻²4, 10⁻²4 (1807); F-G. K & K. MT. Schweiz. Ent. Ges. 6. 394-5 (1882). PALARUS Ltr. Gn. Crust-Ins. 4. 73-5 no. 495 (1809)—[Type: auriginosus Eversm. (= * flavipes Ltr.)]: Ltr. Cons-Gén. Crust-Ins. 322, 438 no. 481 (1810).

Jurine, in the Erlangen List (1801) published the generic name Gonius without explanation, or assignment to it of species. Latreille, in 1805 (HN. Crust-Ins. 13. 296-7) stated that Panzer's figure 84.24 of Philanthus flavines F. represented a Gonius Jrn., but added that the real Philanthus flavipes F. was a different insect, figured by Coquebert (Ill. Ic. Ins. 2. Pf. 13.1). No diagnosis of Gonius Jrn. yet existed, one however was given by Panzer in 1806 (Krit. Rev. 176-8) and *flavipes* Pzr. cited as belonging to it. In 1802, Latreille (HN. Crust-Ins. 3.336) characterised, though without exponents, a genus Palarus, and in 1804-5 (l.c. 13. 296-7) stated that this *Palarus* was identical with Jurine's Gonius, and that Philanthus flavipes Pzr. belonged to it. Accordingly, the generic names Palarus and Gonius were provided with a common exponent simultaneously, and in fact in the same sentence-they are therefore absolutely synonymous, and one must be employed to the exclusion of the other. Panzer, in 1806 (Krit. Rev. 176-8) adopted Gonius, without allusion to Palarus, with whose existence he was probably unacquainted, but all subsequent writers (except Jurine himself, Nouv. Méth. Hym.) have preferred the name Palarus, following Latreille, and apparently with reason, since Palarus Ltr. had been published with a description as well as a Type by Latreille in

1804-5, while Gonius Jrn. remained uncharacterised till 1806.

The specific name "flavipes Pzr." however cannot be accepted—*Philanthus flavipes* Pzr. (1801) not being *Philanthus flavipes* F. (1790) was a homonym erroneous in adoption, and could not be revived when the species was transferred to another genus.

According to Kohl and Dalla Torre, **Palarus auriginosus** Evrsm. [Bull. Soc. Imp. Nat. Mosc. **22**. 384–5 (1847)] = *flavipes Pzr. (nec F.). Since there are doubtless good grounds for this identification it may here be accepted. Latreille, when publishing the names *Gonius* and *Palarus*, (HN. Crust-Ins. **13**. 296–7), sank both under *Larra* F., but this error does not affect the status of *Gonius* and *Palarus*. —**Palarus** Ltr. should be adopted, with the Type **auriginosus** Evrsm. (= *flavipes Pzr., nec F.).

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111.25. MISCOPHUS Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 25 Miscophus"—[a mere logonym, without exponents].

MISCOPHUS Jrn. (1807)

= MISCOPHUS Jrn. (1801) LN.

Type: Miscophus bicolor Jrn. (Jrn. 1807; Ltr. 1809).

MISCOPHUS Jrn. [Erl. Litt-Ztg. 1. 164 no. 25 (1801) LN.]: Nouv. Méth. Hym. 206 no. 25 Pf. 4:25. 11:25 (1807)—[Type: bicolor Jrn. Pf. 11:25]; F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 395 (1882); Ltr. Gn. Crust-Ins. 4. 72 no. 493 (1809): Cons-Gén. Crust-Ins. 323, 438 no. 485 (1810).

This monotypical genus, founded on *bicolor* Jrn., dates from 1807, when it was published in the Nouvelle Méthode —in the Erlangen List it was uncharacterised and contained no species.

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111.26. DINETUS Jrn. Erl. Litt-Ztg. 1. 164."Gen. 26 Dinetus—Crabro pictus. Pompilus guttatus."

DINETUS Jrn. (1801)

Type: Crabro pictus F. (Jrn. 1801, 1807; Pzr. 1806; Ltr. 1809-10).

DINETUS Jrn. Erl. Litt-Ztg. 1. 164 no. 26 (1801)—[1. pictus F. (= pictus F., Jrn.; = guttatus F., Jrn.)]; Pzr. Krit. Rev. Ins. Deutsch. 2. 191-3 (1806)—[Type: pictus F. \Im (= gutattus F. \Im) Pzr.]; Jrn. Nouv. Méth. Hym. 207-8 no. 26 Pf. 4·26, 11·26 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 395 (1882); Ltr. Gn.

Crust-Ins. 4. 72-3 no. 494 (1809): Cons-Gén. Crust-Ins. 323, 438 no. 484 (1810).

Dinetus is a monotypical genus, founded on **Crabro** pictus F. (of which Sphex guttata F. is the \mathcal{P})—Panzer (Krit. Rev. 193) records that he has, again and again, taken the two forms paired.

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III.27. CRABRO (F.) Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 27 Crabro-Crabro."

[*i.e.* CRABRO F. Syst. Ent. **373–6** no. 117 sp. 1–13 (1775): Ent. Syst. 2, p. v, 293–302 no. 155 sp. 1–32 (1793)—cribraria L. etc.]

CRABRO F. (1775).

[nec CRABRO Gffr. (1762) MN.]; = THYREOPUS Lep. (1834).

Type: Sphex cribraria L. (Lmk. 1801; Ltr. 1810; Crt. 1837; Wstwd. 1840).

CRABRO F. Syst. Ent. [26], no. 117, 373-6 no. 117 sp. 1-13 (1775)-[cribraria L. and 12 other species]: Ent. Syst. 2. p. v. 293-302 no. 155 sp. 1-32(1793): Sppl. 270-1 (1798); Pzr. Fn. Ins. 73.18, 78.17 (1800): 83.14-17 (1801): 90.12-13 (1804); Ltr. Prée. Car. Ins. 129-30 no. 32 (1796); Lmk. Syst. An. sans Vert. 270-1 no. 130 (1. 1801)-[Type: cribraria L. (cribrarius F.)]; Jrn. Erl. Litt-Ztg. 1. 164 no. 27 (V. 1801); Ltr. HN. Crust-Ins. 3. 342 (1802): 13. 322-4 no. "ecexexvi" sp. 1-5 (1804-5): Ltr. Nouv. Diet. HN. 6. 467-70 (1803): 24. 181 no. 440 (1804); F. Syst. Piez. p. viii, 307-13, Ind. 8-9, no. 58 sp. 1-25 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 178-84 (1806); Jrn. Nouv. Méth. Hym. 209-12 no. 27 Pf. 4.27, 11.27 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 395) (1882); Ltr. Gn. Crust-Ins. 4. 80-3 no. 500 (1809): Cons-Gén. Crust-Ins. 324-5, 438 no. 490 (1810)—[Type: cribraria L. (= cribrarias F., Ltr.)]; Crt. Br. Ent. 15. expl. Pl. 680 (1838)— [Type: cribraria L.]; Wstwd. Syn. Gn. Br. Ins. 80 (1840).

[nec * CRABRO Gffr. Hist. Ins. Paris 2. 261-4 sp. 1-3 (1762) MN. § CRABRO Gffr-Fourer. Ent. Par. 2. 361-2 no. 83 sp. 1-4 (1785) lutea L. (CIMBEX)].

Fabricius described *Crabro*, in 1775, for the reception of thirteen species including cribraria L. which was specified as the Type by Lamarck in 1801, by Latreille in 1810, Curtis in 1837, and Westwood in 1840. [As a generic name *Crabro* originated with Geoffroy in 1762 (Hist. Ins. Paris), but being published without exponents was invalid *then* and had no definite application until 1785, when Geoffroy (Fourcr. Ent. Paris) enumerated *lutea* L. (= *lunulatus* Gffr.; = annulatus Gffr.) and two other species—all

belonging to the genus known as *Cimbex* Olvr. *Crabro* Gffr. (1785) and *Cimbex* Olvr. (1790) are synonyms, but since § *Crabro* Gffr. (1785) is invalid as homonymous with *Crabro* F. (1775), *Cimbex* Olvr. must be accepted as the name of the genus of which *lutea* L. is the Type.]

In recent arrangements of Crabro F. (sens. lat.) cribraria L. is called not a Crabro, but a Thyreopus Lep. (following Lepeletier 1834), the name Crabro (sens. strict.) being reserved for another group (formosus Auctt., etc.)—before saying more we await Kohl's forthcoming Monograph of the Crabronidae, merely suggesting that Crabro F. should not be separated from its Type cribraria L.

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III 28. Cemonus Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 28 Cemonus—Crabro unicolor Panzer."

CEMONUS Jrn. (1801)

= PEMPHREDON Ltr. ([1796, MN] 1802), $\dagger PEMPREDON$ Ltr. (1804).

Type: Crabro lugubris F. (= unicolor Pzr.; Jrn. 1801).

CREMONUS Jrn. [= PEMPHREDON Ltr. Préc. Car. Ins. 128–9 no. 30 (1796) MN.]. CEMONUS Jrn. Erl. Litt-Ztg. 1. 164 no. 28 (1801)—[Type : lugubris F. (= unicolor Pzr.; Jrn.)] PEMPHREDONLtr. HN. Crust-Ins. 3. 341–2 (1802)—[1. lugubris F.; 2. leucostoma L., F.]: 13. 325 no. "cccxcxvii" (1804–5)—[Type : lugubris F. (unicolor Pzr. 52·24)]: Nouv. Diet. HN. 17. 222 (1803): (†PEM-PREDON) 24 Tbl. Méth. 181, 199 no. 441 (1804)—[Type : lugubris F.]; F. Syst. Piez. p. xi, 314–6 no. 59 sp. 1–9 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 186–7 (1806). CEMONUS Jrn. Nouv. Méth. Hym. 213–4 no. 28 Pf. 4·28, 11·28 (1807); F.G. K. & K. MT. Schweiz. Ent. Ges. 6. 395 (1882). PEMPHREDON Ltr. Gn. Crust-Ins. 4. 83–4 no. 501 (1809): Cons-Gén. Crust-Ins. 325, 438 no. 492 (1810)— [Type: lugubris F. (= unicolor Jrn.; Ltr.); Crt. Br. Ent. 14. expl. Pl. 632 (1837). CEMONUS Wstwd. Syn. Gn. Br. Ins. 81 (1840).

Panzer, Fauna Ins. Germ. (52.24), figures as *Crabro* unicolor (but describes as *Sphex unicolor*), an insect, which in Krit. Rev. (186-7), he states to be a *Cemonus* Jrn., and identical with *Pemphredon lugubris* F. (Syst. Piez. 315). The neuration of his figure is so obviously incorrect that no conclusion can safely be drawn from it, nor in characterising *Cemonus* in the Krit. Rev. (186-7) does Panzer mention the neuration at all. The *true* neuration of "unicolor Pzr.," the Type of *Cemonus* is correctly given by Jurine on Plate 4 fig. 28—one of the Plates which had

been sent for inspection to the writer of the Erlangen Article —and confirms Panzer's statement, in the Kritische Revision, that his unicolor was the lugubris of Fabricius. This species is at present known as a Pemphredon Ltr., being in fact the Type designated for that genus by its author in 1804–5, and again (under the name Cemonus unicolor Pzr.) in 1810. Cemonus and Pemphredon are therefore synonyms, with the common Type lugubris F. (= unicolor Pzr.), on the authority of Panzer, Latreille, and also Jurine. The name Cemonus Jrn. has validity as against Pemphredon Ltr., because it was published as a monotypical genus in May 1801, whereas Pemphredon Ltr., though the name itself appeared earlier (viz. in 1796), received no species until 1802, when lugubris F. and leucostoma F. were made exponents of it.

[The name *Cemonus* is still sometimes used rather as subgeneric than as generic, unfortunately in connection with a group not containing **lugubris**, but containing several other species, two of which till lately were not distinguished and together were called *unicolor*. This "*unicolor*" was a homonym of "*Crabro unicolor* Panzer" (= **lugubris** F.), and should therefore be discarded—as in practice it has already been.]

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111²9. OXYBELUS Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 29 Oxybelus—Crabro lineatus, uniglumis, biglumis." OXYBELUS Jrn. (1801)

= OXYBELUS Ltr. (1796) MN.

Type: Vespa uniglumis L. (Ltr. 1802, 1804, 1810; Crt. 1833; Wstwd. 1840).

OXYBELUS Jrn. [Ltr. Préc. Car. Ins. 129 no. 31 (1796) MN]: Jrn. Erl. Litt-Ztg. 1. 164 no. 29 (1801)—[1. lineatus F.; 2. uniglumis L., F.; 3. biglumis L.]; Ltr. HN. Crust-Ins. 3. 342–3 (1802)— [Type: uniglumis L.]: 13. 307–8 no. 399 sp. 1–3 (1804–5): Nouv. Dict. HN. 24. Tbl. Méth. 180, 199 no. 433 (1804); F. Syst. Piez. p. viii, 316–8, Ind. 21, no. 60 sp. 1–7 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 190–1 (1806); Jrn. Nouv. Méth. Hym. 216–7 no. 29 Pf. 4·29, 11·29 (1807); Pzr. Fn. Ins. Germ. 101·19 (1809); Ltr. Cons-Gén. Crust-Ins. 324, 438 no. 489 (1810)—[Type: uniglumis L.]; Crt. Br. Ent. 10. expl. Pl. 480 (1833); Wstwd. Syn. Gn. Br Ins. 79 (1840).

Oxybelus was published by Latreille in 1796, but without associated species, and was first validated by Jurine in 1801 (Erlangen List). Jurine gave three exponents, and

one of these, *uniglumis* L., was cited as type by Latreille (1802–10), by Curtis (1833), and by Westwood (1840).

Biglumis L. is more or less a mystery; it is generally explained as a form of *Polistes*, but Jurine evidently interpreted it otherwise.

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111.30. PROSOPIS Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 30 Prosopis—Sphex annulata, signata Panzer. Hylaeus annulatus Fab. Mellinus atratus Fab. inedit."

HYLAEUS F. (1793)

= PROSOPIS Jrn. 1801; $\dagger HYLEUS$ Wlknr. (1802).

Type 1: Apis annulata L. (= Hylaeus annulatus F.; Ltr. 1802, 1804, 1810; Crt. 1831; Wstwd. 1840).

HYLAEUS F. Ent. Syst. 2. pp. vi, 302–7 no. 156 sp. 1–16 (1793)— [Sixteen species, including 12 annulata L. (*Apis annulata* L. =*Hylaeus annulatus* F.]; Ltr. Préc. Car. Ins. 136 no. 39 (1796); Pzr. Fn. Ins. Germ. 7·15 (1796): 46·13–14 (1797): 53·17–18, 55·2–4 (1798): 64·15 (1799); F. Sppl. Ent. Syst. 272 (1798); Wiknr. Fn. Par. Ins. 2. p. vi, 100–2 no. 24 sp. 1–3 (1802); Ltr. HN. Crust-Ins. 3. 370, 372 (1802)—[Type: annulata L. (= annulatus F., Ltr.)]: 13. 360–1 no. 407 sp. 1–3 (1804–5): Nouv. Dict. HN. 11. 494–6 (1803): 24. Tbl. Méth. 182, 199 no. 451 (1804)—[Type: annulata L.]: Gn. Crust-Ins. 4. 149–50 no. 541 (1809): Cons-Gén. Crust-Ins. 331, 438 no. 508 (1810)—[Type: annulata L.]; Crt. Br. Ent. 8. expl. Pl. 373 (1831)—[Type: annulata L.]; Wstwd. Syn. Gn. Br. Ins. 84 (1840).

Fabricius [Syst. Piez. 293 no. 55 sp. 1, Ind. 14, 25, (1804)] removed annulata L. to *Prosopis*, but Latreille had already cited this species as the Type of *Hylaeus* F., in 1802, and it was again cited by Latreille in 1804–5, and 1810, as also by Curtis, in 1831, and by Westwood, in 1840.

Type 2: Sphex signata Pzr.

PROSOPIS Jrn. Erl. Litt-Ztg. 1. 164 no. 30 (1801)—[Sphex signata Pzr. (= annulata Pzr. 53[•]1 $_{\bigcirc}$; = signata Pzr. 53[•]2 $_{\bigcirc}$); Apis annulata L. (= Hylaeus annulata F.); Mellinus atratus F. LN.] F. Syst. Piez. p. xi, 293-6, Ind. 25, no. 55 sp. 1-14 (1804); Pzr. Fn. Ins. Germ. 89[•]14 (1804): 105[•]15 (1809): Krit. Rev. Ins. Deutsch. 2. 161-3 (1806); Jrn. Nouv. Méth. Hym. 218-20 no. 30 Pf. 4[•]30, 11[•]30 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 395-6 (1882)— [signata Pzr. should be taken as the Type].

[nec *HYLAEUS Cvr. Tbl. Elem. HN. 493-4 (1797-8)-glutinans Cvr. (Colletes Ltr.)].

[nec **HYLAEUS* F. Syst. Piez. p. xiii, 319-21 no. 61 sp. 1-8, Ind. 14 (1804)—sexcinctus F. (HALICTUS Ltr.)].

The Erlangen List enumerates under *Prosopis* :----1. Sphex annulata; 2. signata Panzer; 3. Hylaeus annulatus Fab.; 4. Mellinus atratus Fab., inedit.

This "Sphex annulata" cannot possibly be the Fabrician Sphex annulata F. [Sppl. Ent. Syst. 245 (1798); Coq. Ill. Ic. Ins. 2.51 Pf. 12.4 (1801)], which is a highly coloured Cryptocheilus Pzr. (= § Salius F.)—a Psammocharid.

Mellinus atratus may also be set aside as a species then undescribed. Panzer has figured a Sphex annulata Pzr. (53.1) and a Sphex signata Pzr. (53.2)—the former a \mathcal{J} , the latter a \mathcal{Q} , both certainly belonging to Prosopis Auctt. Neither shows any trace of lateral white hairs on the first abdominal segment, or of yellow streaks on the pronotum, etc.—it is probably impossible to identify either with certainty, but there is no reason to say that the former is not the \mathcal{J} of annulata L. (= communis Auett.), and the latter the \mathcal{Q} of signata Auett. (= bipunctata F., sec Dalla Torre), except that signata has white hairs on the first abdominal segment laterally which do not appear in Panzer's figure. In 1807 Jurine figures Prosopis bifasciatus (sic) as representative of his genus, but this was not one of the species which he listed in 1801.

[It should be noted that the name "Sphex bimaculata" is associated with the diagnosis of Sphex signata Pzr. (53.2), but evidently by mistake, since Panzer published Sphex bimaculata as a species 51.4.]

The genus Hylaeus was first published by Fabricius, in 1793, for the reception of sixteen species, including annulata L. Prosopis hitherto has not been traced to an earlier date than 1807 (Nouv. Méth. Hym.), but the Erlangen List carries it back to 30 May 1801—even so, however, Hylaeus F. (1793) is by far the older name, and, if the two genera be identical, Hylaeus having always had priority cannot now be discarded. We come to this decision with considerable regret, quite agreeing with Latreille [Gen. Crust-Ins. 4. 149–50 (1809)] that the genus Hylaeus F. was "characteribus incertis fulcitum et specierum complexione maxime discordans," and that the genus Prosopis had been treated by Fabricius with equal infelicity, to which we must add that Prosopis Jrn. is a genus, which, apart from the name, fulfils every requirement of modern science.

The Type of Hylacus F. was cited by Latreille (1802, etc.) as Hylacus annulatus F.; the Type of *Prosopis* Jrn. should be either the same species, or that which Jurine figured

to represent it in Nouv. Méth. Hym., viz. signata Pzr. (= bifasciatus Jrn. Pf. 11.30). Jurine agrees that Hylaeus and Prosopis are identical—signata Pzr. 53.2 (= bifasciatus Jrn. Pf. 11.30) should be eited as the Type of Prosopis Jrn. (1801) which will sink as synonymous with the earlier genus Hylaeus F. (1793).

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111.31. NOMADA (F.) Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 31 Nomada—Nomada ruficornis, etc."

[*i. e.* NOMADA Sep. Ann. HN. **4**. **44**–7 no. 3 sp. 1–8 (1770); F. Syst. Ent. 388–90 no. 120 sp. 1–7 (1775): Ent. Syst. **2**. pp. vi, 345–9 no. 160 sp. 1–15 (1793)—ruficornis L., *etc.*]

NOMADA Sep. (1770)

Type 1 : Apis ruficornis L. (Jrn. 1801; Ltr. 1802).

NOMADA Sep. Ann. HN. 4. 44–7 no. 3 sp. 1–8 (1770)—[ruficornis, L. and seven other species]: F. Syst. Ent. pp. [27], 388–90 no. 120 sp. 1–7 (1775)—[ruficornis L., etc]: Ent. Syst. 2. pp. vi, 345–9 no. 160 sp. 1–15 (1793); Ltr. Préc. Char. Ins. 137–8 no. 41 (1796); Pzr. Fn. Ins. Germ. 32-7 (1796): 53:20–4, 55:18–24 (1798): 61:20, 62:18, 72:17–21 (1799): 78:20 (1800): 96:20–2 (1804); Jrn. Erl. Litt-Ztg. 1. 164 no. 31 (30. V. 1801)—[Type: ruficornis L., F.]; Ltr. HN. Crust-Ins. 3. 370, 375 (1802)—[Type: ruficornis L.]: 14:49–50 no. 417 sp. 1–2 (1804–5); F. Syst. Piez. pp. xiii, 390–5, Ind. 20, no. 76 sp. 1–19 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 234–9 (1806); Jrn. Nouv. Méth. Hym. 221–3 no. 31, Pf. 4'31, 11'31 (1807); Ltr. Gn. Crust-Ins. 4. 169–70 no. 561 (1809); Crt. Br. Ent. 9. expl. Pl. 419 (1832)—[Type: ruficornis L.]; Wstwd. Syn. Gn. Br. Ins. 85 (1840).

Type 2: Apis fabriciana L. (Ltr. 1810).

[nec *NOMADA Lmk Syst. An. sans Vert. 274 no. 136 (I. 1801) --variegata L. (EPEOLUS Ltr.)--this was not one of the original types of Scopoli (1770), but it was included in Nomada by Fabricius (1775)].

Nomada was founded by Scopoli, in 1770, on eight species named as follows:—1. riparia Scp.; 2. succincta Scp.; 3. squalida Scp.; 4. rufescens Scp.; 5. ruficornis Scp.; 6. ranunculi Scp.; 7. praecox Scp.; 8. nasuta Scp.

Of these succincta is stated by Fabricius to be gibba F. (a Sphecodes); squalida is said by Gmelin to be larger than gibba, with antennae twice as long (perhaps gibba F. was a \mathcal{Q} , and squalida Sep. a \mathcal{J}); Gmelin adds that ranunculi Sep. has the segments of the abdomen red at the margin on each side; that nasuta Sep. has an oblong abdo-

men, porrect, blunt maxillae (*i. e.* mandibles) and a bristleshaped tongue (*i. e.* probably an Apis in the sense of Kirby, perhaps a *Chelostoma*); praecox Scp. is generally supposed to be the *Andrena* so-called by recent authors (sec. Dalla Torre Cat., etc.).

Lamarck, in 1801, (Syst. An. sans Vert. 136) cited Apis variegata L. (an Epeolus Ltr.) as the Type of Nomada F. this species was included in those enumerated by Fabricius, but did not occur among Scopoli's types.

In 1775, Fabricius described a genus Nomada, without allusion to Nomada Scopoli. Were Nomada F. and Nomada Scp. the same genus? If not, Nomada F., one of the oldest and most universally adopted of all generic names must sink as a homonym—yet it is very difficult to answer the above question positively in the affirmative. Fabricius' original genus consisted of seven species, of which only two (ruficornis and fabriciana) belong to Nomada as at present accepted.

There is a *ruficornis* among Scopoli's species, but J. L. Christ [Naturg. Class. Ins. 161 (1791)], after briefly describing Nomada ruficornis Sep., says that Fabricius describes a "Verschiedenheit" (Variety ?) as Nomada ruficornis, and, mentioning inter alia, that Fabricius' species has the thorax marked with red, and the abdomen with vellow-these characters, apparently, not existing in Scopoli's insect. The latter, however, seems to be a Nomada in the modern sense (not, as might be suggested, a Sphecodes), since the antennae, labrum, and parts of the legs are said to be red. If ruficornis Scp. and ruficornis F. are conspecific (i. e. different sexes, or varieties, of the same insect) the Type of Nomada Scp. is fixed, since Fabricius includes this species in his genus, of which it is cited as the Type by Latreille (1802), Curtis (1832), and Westwood (1840). It is clear at any rate that if any species of Nomada Scp. can be identified with a Nomada in the modern sense, that species ought to be treated as the Type of Scopoli's genus-otherwise needless and intolerable confusion will be introduced into our Lists.

III.32. ANDRENA (F.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 32 Andrena—Andrena succincta, bicolor. Andrena (Nomad. Fabr. inedit) lobata Panzer. Nomada gibba Fabr. Andrena musciform. Ross. (Nomada Nigrita Fabr. inedit.) TRANS. ENT. SOC. LOND. 1914.—PARTS III, IV. (FEB.) E E * Bullae alarum in Nomadis et Andrenis semper reperiuntur in nervis cubitalibus et recurrentibus."

[*i.e.* ANDRENA F. Ent. Syst. [26], 376-8 no. 118 sp. 1-14 (1775): Ent. Syst. 2. pp. vi, 307-14 no. 157 sp. 1-31 (1793)—succineta L., *bicolor* F., etc.]

ANDRENA F. (1775)

Type 1: Apis succincta L. [nec Ltr., nec Auctt.] (Lmk. 1801).

ANDRENA F. Syst. Ent. [26], 376-8 no. 118 sp. 1-14 (1775)—[4. bicolor F.; 14. succineta L., and twelve other species]: Ent. Syst. 2. pp. vi, 307-14 no. 157 sp. 1-31 (1793); Pzr. Fn. Ins. Germ. 7:10 (1793): 7'13, (2 edn.) 35:22 (1796): 46:15-17 (1797): 53:19, 55:5, 56:1-3 (1798): 64:16-20, 65:18-20, 70:22, 72:15-16 (1799): 74:10 (1801): 85:15, 90:14-15, 94:10-11 (1804): 97:18-19, 107:14 (1809); Ltr. Préc. Car. Ins. 136-7 (1796); Lmk. Syst. An. sans Vert. 272 no. 133 (I. 1801)—[Type: succineta L.]; Jrn. Erl. Litt-Ztg. 1. 164 no. 32 (30. V. 1801). [nec COLLETES Ltr. HN. Crust-Ins. 3. 372 (1802): 13. 359 no.

[nec COLLETES Ltr. HN. Crust-Ins. 3. 372 (1802): 13. 359 no. 406 (1804-5): Nouv. Diet. HN. 24. 181-2, 199 no. 450 (1804); Ltr. Cons-Gén. Crust-Ins. 331, 438 no. 507 (1810)—Type: glutinans Cvr. (= * succincta [nec L.] Ltr.)].

Type 2: Apis cineraria L. (Ltr. 1810).

*ANDRENA Ltr. HN. Crust-Ins. 3. 372-3 (1802): 13. 362-4 no. 408 sp, 1-4 (1804-5): Nouv. Dict. HN. 24. Tbl. Méth. 182 no. 452 (1804); Jrn. Nouv. Méth. Hym. 227-31 no. 32 Pf. 4·32, 11·32 (1807); Ltr. Gn. Crust-Ins. 4. 150-1 no. 652 (1809): Cons-Gén. Crust-Ins. 332, 439 no. 510 (1810)--[Type: cineraria L., F.]; Wstwd. Syn. Gn. Br. Ins. 84 (1840).

Type 3 : Andrena bicolor F.

*ANDRENA Pzr. Krit-Rev. Ins. Deutsch. 2. 193-204 (1806).

Type 4: Melitta nitida Kby (Crt. 1826).

*ANDRENA Crt. Br. Ent. 3. expl. Pl. 129 (1826)—[Type: nitida Kby.].

Lamarck, in January 1801, made succincta L. the Type of Andrena. Latreille, in 1802, also cited succincta L. as a type, but of another genus, viz. Colletes Ltr. At first sight it might appear that Colletes Ltr. would consequently have to become a synonym of Andrena F. (isogenotypic), but before so deciding it will be wise to consult the original description of succincta L. [Syst. Nat. (ed. 10) 1. 576]. The character there mentioned which at once arrests attention is "rostrum subulatum"—this in our judgment makes it perfectly certain, that whatever succincta L. was, it was not a Colletes. In Colletes the tongue is short, broad, and bifid at the apex—" subulatum" is of all possible words least applicable to it! Next we note that succincta has four white bands (presumably four only) on the abdomen, whereas Colletes species generally have all the segments

banded. Linné's description can only refer to one of the Acutilingues (such as Andrena F., Halictus Ltr., and Cilissa Leach)-of these, Cilissa has an extremely subulate tongue; *Halictus* also one which is distinctly subulate; and Andrena one, which as compared with that of Colletes might be called so. Yet there seems no doubt that Linné named and placed in his cabinet as succincta a specimen of Colletes. Kirby, in 1800, saw this specimen, and noticed at once that the tongue did not agree with Linné's description. Nvlander also (about 1850) examined the specimen, and has stated that it was a *Colletes*, not however the insect now commonly called succincta, but a specimen of fodiens Geoffr-Fourcr. Kirby and Latreille were in correspondence about this insect, and it is quite certain that to both these authors "succincta" meant the species sonamed in the Linnean cabinet, viz. a Colletes, and not an Andrena. But Lamarck's Andrena succincta F. (Apis succincta L.) was as certainly not a Colletes, for his diagnosis of the genus states expressly "Machoires et langue fort allongées "--plainly, therefore, reckoning it among the Acutilingues. The designation therefore of succincta L. as Type of Andrena, in the modern sense, may be accepted until it is shown for certain that the insect really described by Linné (NB.-not the specimen in his Cabinet!) was not, after all, a Halictus (such as quadricinctus F.), or a Cilissa (such as leporina Pzr.).

Colletes Ltr. being a good genus, and not a synonym of Andrena F., therefore stands, but the species which is its Type must not be called succincta. Latreille, as Kirby tells us, sent the species to him with the name "glutinosus" this was published by Cuvier as Hylaeus glutinans (Apis glutinans)—Tbl. Element. HN. 493-4 (An. VI.= 1797-8), and is mentioned as a synonym of Colletes succincta by Latreille (HN. Crust-Ins. 13. 355, 359). The species should be known as Colletes glutinans Cuvier (= *succincta [nec L.] Ltr.).

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III.33. LASIUS Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 33 Lasius-Apis quadrimaculata Panzer."

[nec §LASIUS F. Syst. Piez. pp. xi, 415-8, Ind. 18, no. 78 sp. 1-10 (1804)].

LASIUS Jrn. (1801)

= PODALIRIUS Ltr. (1802); = ANTHOPHORA Ltr. (1803); = MEGILLA F. (1804).

Type 1: Apis quadrimaculata Pzr. (Jrn. 1801).

LASIUS Jrn. Erl. Litt-Ztg. 1. 164 no. 33 (30 V. 1801)—[Type: quadrimaculata Pzr.]; Pzr. Fn. Ins. Germ. 86·16, 89·15 (1804); Jrn. Nouv. Méth. Hym. 235–8 no. 33 Pf. 4·33, 11.33 (1807): F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 397 (1882).

Type 2: Apis pilipes F. (Ltr. 1810).

PODALIRIUS Ltr. HN. Fourmis etc. 430-1 (IV. 1802)—[1. rotundata F.; 2. retusa L. (= acervorum F., Ltr.); 3. pilipes F. [pilipes F. (1775) \Im ; = hirsuta F. (1787) \Im]; 4. versicolor F.; 5. crassipes F.; 6. lanipes F.]: HN. Crust-Ins. 3. 371, 378-9 (1802)—[pilipes F.; versicolor F.; crassipes F.]. = ANTHOPHORA (nn.) Ltr. Nouv. Dict. HN. 18. 167-9 (1803): 24. Tbl. Méth. 183, 199 no. 458 (1804) ["Voyez Podalirie": 1. pilipes F. (= hirsuta F., Ltr.); 2. versicolor F.]: HN. Crust-Ins. 13. 375-7 (1804-5) ["Anthophore—mot substitué à celui de podalirie que Lamarek avoit déjà donné à un genre de plante"]: 14. 45-8 no. 414 sp. 1-3 (1804-5) [anthophore, \Rightarrow podalirie, = lasius Pzr.]: Gn. Crust-Ins. 4. 174-6 no. 567 (1809): Pzr. Fn. Ins. Germ. 99'16, 105'18-9; 106'19 (1809): Cons-Gn. Crust-Ins. 340, 439 no. 537 (1810)—[Type: pilipes F.]. MEGILLA F. Syst. Piez, pp. xiii, 328-35 no. 63 sp. 1-33 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 193, 207-9, 224-7, 227-9, 246-7, 257, 260 (1806).

Type 3: Apis parietina F. (Ltr. 1804).

ANTHOPHORA Ltr. An. Mus. HN. Paris 3. 251-9 Pf. 22¹A^{-D} (II¹804)—[parietina F.—not an original Type].

Type 4: Apis retusa L. (Crt. 1831).

ANTHOPHORA Crt. Br. Ent. 8. expl. Pl. 357 (1831)-[Type: retusa L.].

Lasius Jrn. of the Erlangen List (1801) is a monotypical genus founded on Apis quadrimaculata Pzr. 56.7 (= §vulpina Pzr. 56.6, Jrn.)—both these names were published together in 1798. Dalla Torre lists the species as "Podalirius vulpinus Pzr.," treating quadrimaculata Pzr. as a synonym, but \$Apis vulpina Pzr. (1798) is invalid, being homonymous with Apis vulpina Christ (1791)—the species should therefore be known as Lasius quadrimaculatus Pzr.* Later, and therefore unavailable, synonyms of Lasius Jrn. (1801) are Podalirius Ltr. (1802), Anthophora Ltr. (1804–5) and Megilla F. (1804)—Panzer adopted the last of these in the Krit. Rev (1806).

Until recently Lasius Jrn. was almost universally called Anthophora Ltr., but in Dalla Torre's Catalogue (1896), and immediately after in Friese's Monograph of the genus (1897), Podalirius Ltr. has been restored—Friese applying

^{*} Apis vulpina Christ is utterly unlike Lasius quadrimaculatus Pzr. (= Apis vulpina Pzr.)—it may possibly be = parietina F., if Palaearctic (but the locality is not stated).

the name both to the genus as a whole, and also (sensu stricto) to a section.

In the Systema Piezatorum Fabricius made use of Jurine's name Lasius, but applied it to a genus of Ants which he separated from Formica L., and later authors have ignored Jurine's Lasius, no doubt because the publication of the Piezatorum (1804) antedates that of the Nouvelle Méthode (1807). But the real date of Lasius Jrn., as we now learn, is May 30, 1801 (Erlangen List)—Lasius F. (1804) therefore sinks as a homonym of the earlier Lasius Jrn.

A new name for $\S Lasius$ F. is necessary, there being, apparently, no existing synonym, we therefore propose that it be called **DONISTHORPEA** in recognition of Mr. H. St.J. K. Donisthorpe's careful investigations into the bionomics of this and other Heterogynous genera.

DONISTHORPEA, nn.

Type: Formica nigra L. (= Lasius niger F.).

= §LASIUS F. Syst. Piez. pp. xi, 415-8 no. 78 sp. 1-10, Ind. 18 (1804); Auctt.—[nec LASIUS Jrn. (1801)]).

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III.34. CROCISA Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 34 Crocisa—Apis punctata. Nomada scatellata. Andrena armata Panzer."

CROCISA Jrn. (1801)

= THYREUS Pzr. (1806).

Type 1 : Melecta histrionica Illig. (=*scutellaris [nec F.] Pzr.; Ltr. 1810—[=†scatellata Jrn.]).

CROCISA Jrn. Erl. Litt-Ztg. 1. 164 no. 34 (30. V. 1801). [1. punctata F. (punctata F. 1775, Jrn.; = armata Pzr. 1799, Jrn.); 2. histrionica Illig. (=*scutellaris [nec F.] Pzr.; †scatellata Jrn.)]. THYREUS Pzr. Krit. Rev. Ins. Deutsch. 2. 263-4 (1806)—[Type: histrionica Illig. (=*scutellaris [nec F.] Pzr.)]. CROCISA Jrn. Nouv. Méth. Hym. 239-41 no. 34 Pf. 4·34, 12·34 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 397 (1882); Ltr. Gn. Crust-Ins. 4. 172 no. 565 (1809): Cons-Gn. Crust-Ins. 338, 439 no. 532 (1810)—[Latreille's generic description excluded punctata F. (the Type of MELECTA Ltr.) and consequently restricted CROCISA to histrionica Illig. (=*scutellaris Pzr.) which thus became the Type histrionica Illig. is congeneric with histrio F. which was not an original type].

[NB. Crocisa histrionica Illiger.—Melecta histrionica Illig. Mag. Ins. 5. 99 sp. 10 (1806). = Nomada *histrio? (nec F.) Rossi Fn. Etrusc. 2. 110 sp. 930 (1790). = Nomada *scutellaris (nec F.) Pzr. Fn. Ins. Germ. 32.7 (1796). = Nomada \ddagger scatellata Jrn. Erl. Litt-Ztg. 1. 164 no. 34 (1801).]

Type 2: Melecta histrio F. (Ltr. 1810).

CROCISA Ltr. Cons-Gen. Crust-Ins. 338, 439 no. 532 (1810)— [Type: histrio F.—this was not an original type, but is congeneric with histrionica Illig., the Type as shown above.]

The names *Crocisa* Jrn. and *Melecta* Ltr. were originally given to the same generic conception, but as they are now restricted to different types it will be convenient to print the history of *Melecta* for reference.

MELECTA Ltr. (1802)

Type: Apis punctata F. (Ltr. 1802-10; Crt. 1826).

MELECTA Ltr. HN. Fourmis etc. 427 (IV. 1802)---[Type: punctata F. (with which are associated histrio F. and scutellaris F.): HN. Crust-Ins. 3. 370, 376 (1802)---[punctata F., and histrio F.]: Nouv. Dict. HN. 14. 249-50 (1803): 24. 183, 199 no. 459 (1803)---[Type: punctata F.]; F. Syst. Piez. pp. xiii, 385-7 no. 74 sp. 1-7, Ind. 19 (1804); HN. Crust-Ins. 14. 48 no. 415 (1804-5)---[Type: punctata F. (Pzr. 35²3, 70²2)]: Gn. Crust-Ins. 4. 171-2 no. 564 (1809): Cons-Gn. Crust-Ins. 338, 439 no. 533 (1810); Pzr. Fn. Ins. Germ. (2 edn.) 32⁻⁷, 35²3 (1810?); Crt. Br. Ins. 3. 125 (1826); Wstwd. Syn. Gn. Br. Ins. 85 (1840).

The name Crocisa was first published in the Erlangen List. Of the three specific names included under it, two (punctata and armata) are synonyms and denote the species described by Fabricius (1775) as Apis punctata (= Melecta armata Pzr., of Dalla Torre's Catalogue). The third name "Nomada scatellata" (sic) is evidently intended for the "Nomada scatellaris Fab." figured by Panzer (Fn. Ins. Germ. 32.7) as shown by Jurine (Nouv. Méth. Hym. 241).

Illiger (1806) recognised that the *scutellaris* of Panzer was not the true *scutellaris* of Fabricius, and renamed Panzer's species histrionica Illiger.

The genus Crocisa then was founded on two species, viz. punctata F. and histrionica Illig., one of which must be its Type.

In 1802 Latreille published his genus Melecta for punctata **F.**, with which he associated histrio **F**. and scutellaris **F**. (HN. Fourmis etc.). Later in the same year he again used Melecta to include punctata and histrio but omitted scutellaris, and in 1803 he cited punctata **F**. as the Type of Melecta Ltr.

In 1809-10 Latreille definitely broke up the genus which he had formerly called *Melecta* into two genera, viz. *Melecta* Ltr. and *Crocisa* Jrn., distinguishing them on the same characters by which we still separate them (viz,

the number of joints of the maxillary palpi, and the structure of the scutellum—bidentate in *Melecta*, emarginate in *Crocisa*. As before he cites *punctata* F. as the Type of *Melecta*; for *Crocisa* he cites as Type *histrio* F., which however was not one of the original exponents of the genus, though included in it later in the Nouvelle Méthode. His description of *Crocisa* so limits that genus as to exclude from it *punctata* F., and thereby makes *histrionica* Illiger (= "Nomada scutellata" of the Erlangen List) its only possible Type.

Note on Nomada scutellaris F. Sp. Ins. 1. 487 (1781)-nec Pzr.

Fabricius described "Nomada scutellaris" saying of it "Habitat in Sibiria, D. Pallas. Mus. Dom. Banks." The Banks Collection, now in the British Museum (Nat. Hist.) contains a single specimen labelled scutellaris, but this certainly did not come from Siberia, being in fact an Australian Crocisa with blue pubescent markings. It has since been determined as C. lamprosoma Bdv.

It is not very clear from Fabricius' language whether the insect described was a *Crocisa* or a *Melecta*. His diagnosis says "scutello porrecto bidentato," the fuller description following says "scutellum postice productum emarginato bidentatum"—no allusion is made to the maxillary palpi. Whatever this mysterious species really was, it seems very improbable that it should be identical with the Central European form figured by Panzer and cited by Jurine in the Erlangen List.

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III.35. APIS (L.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 35 Apis-Apis mellifica: praeter hanc nulla."

[*i.e.* APIS L. Syst Nat. (ed. **10**) **1**. 343 no. 217, 574-9 no. 218 sp. 1-39 (1758)-mellifera L., etc.]

APIS L. (1758)

Type: Apis mellifera L. 1758 (= mellifica L. 1767; Lmk. 1801, Jrn. 1801, Ltr. 1802–10).

APIS L. [Fn. Suec. (ed. 1) 298-305 sp. 988-1018 (1746) MN.]: Syst. Nat. (ed. 10) 1. 343 no. 217, 574-9 no. 218 sp. 1-39 (1758)-[Thirty-nine species, including mellifera L.]: Fn. Suec. (ed. 2) [42-3], 419-26 sp. 1684-1719 (1761): Syst. Nat. (ed. 12) 1 (2). 539, 953-61 no. 248 sp. 1-55 (1767) [mellifera L. 1758 (= mellifica L., 1767) etc.]; F. Syst. Ent. [27], 378-88 no. 119 sp. 1-60 (1775); Blmbch. HB. Naturges. 1. 382-5 no. 60 sp. 1-6 (1779); F. Ent. Syst. 2. pp. vi, 314–42 no. 158 sp. 1–123 (1793): Sppl. 273–7 (1798); Pzr. Fn. Ins. Germ. 1^{,1}6, 7^{,11–15} (1793): 35^{,23} (1796): 55^{,6–17}, 56^{,4–24}, 59^{,6–7} (1798): 63^{,20–2} (1799): 74^{,11–12}, 75^{,19–21}, 78^{,18–19}, 80^{,19–21} (1800): 81^{,19–21}, 83^{,18–19}, 85^{,16–18} (1804); Ltr. Préc. Car. Ins. 138–9 (1796); Lmk. Syst. An. sans Vert. 273 no. 135 (I. 1801)–[Type: mellifera L. (= mellifica L.; Lmk.]]; Jrn. Erl. Litt-Ztg. 1. 164 no. 35 (V. 1801)–[Type: mellifera L. (= mellifica L., Jrn.)]; Ltr. HN. Fourmis etc. 438 (1802): HN. Crust-Ins. 3. 371, 386–7 (1802): 14. 66–8 no. 423 sp. 1–5 (1804–5): Nouv. Dict. HN. 1. 2–50 (1803): 24. Tbl. Meth. 184, 199 no. 467 (1804)–Type: mellifera L. (= mellifica L., Ltr.)]; F. Syst. Piez. xiv, 368–71, Ind. 1–3 no. 71 sp. 1–12 (1804); Pzr. Krit Rev. Ins. Deutsch. 2. 106–7, 254–7 (1806); Jrn. Nouv. Méth. Hym. 242–4 no. 35 Pf. 4^{,35}, 12^{,35} (1807); Ltr. Gn. Crust-Ins. 4. 181–2 no. 574 (1809): Cons-Gn. Crust-Ins. 341, 439 no. 543 (1810).

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III.36. TRACHUSA Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 36 Trachusa—Apis maculata, bicornis, fusca, rufa. Apis cornigera Ross. fronticornis. (Taurus Fabr. inedit.)— Panzer. aterrima Panzer."

TRACHUSA Jrn. (1801)

= STELIS Pzr. (1806).

Type: Apis aterrima Pzr. 61·15 (M. & D. 1915; [Pzr. 1806]). TRACHUSA Jrn. Erl. Litt-Ztg. 1. 164 no. 36 (V. 1801)— [1. manicata L. (= maculata F., Jrn.); 2. bicornis L. (= rufa L., Jrn.; = cornigera Rossi, Jrn.; = fronticornis Pzr. [Tauras F. ined.] Jrn.); 3. bicolor Schrk. (= fusca Chr., Jrn.); 4. aterrima Pzr., Jrn.]; Pzr. Fn. Ins. Germ. 86·14–15, 96·18–19 (1804): Krit. Rev. Ins. Deutsch. 2. 10, 204, 209, 224, 227, 230, 239, 241, 246, 247, 265 (1806); Jrn. Nouv. Méth. Hym. 247–53 no. 36 Pf. 4·36, 12·36 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 397 (1882). STELIS Pzr. Krit. Rev. Ins. Deutsch. 2. 246–7 (1806)—[Type: aterrima Pzr. 61·15]; Ltr. Gn. Crust-Ins. 4. 163–4 no. 554 (1807): Cons-Gn. Crust-Ins. 335, 439 no. 521 (1810).

Of the seven names enumerated by Jurine in the Erlangen List (1801) as exponents of the new genus *Trachusa*, the first, *maculata*, denotes an *Anthidium* F.; the last, *aterrima*, a *Stelis* Pzr.; and all the others are at present included in *Osmia* Pzr. It will be observed that the only species now generally assigned to *Trachusa* Jrn. (viz. *serratulae* Pzr. **86**⁽¹⁵⁾) is not one of these seven original exponents of the genus, although it is enumerated among the species of *Trachusa* in the Nouv. Méth. Hym. (1807). This, therefore, cannot be accepted as the Type of *Trachusa* Jrn. (1801). Neither is the species figured by Jurine in

the Méthode as representing *Trachusa*, (viz. *cincta* Jrn., Pf. **12**[.]36—a *Dioxys* Lep.) one of the original types.

The real Type of *Trachusa* Jrn. (1801) can only be an *Anthidium* F. (1804), an *Osmia* Pzr. (1806), or a *Stelis* Pzr. (1806), and as *Trachusa* antedates all these names one of them must give place to it.

Osmia and Anthidium are both very long genera-Ducke in 1900 monographed 266 Palaearctic species of Osmia, and Friese, in 1898, 148 Palaearctic species of Anthidium, whereas Friese only records 22 forms of Stelis in 1895 (including varieties and synonyms). Clearly, therefore, by far the least inconvenience will be caused by retaining the names Anthidium and Osmia in their present senses and sinking only the somewhat less familiar Stelis Pzr. In justification of this method of meeting the difficulty, we may add that Stelis is a parasitic genus resembling in habits, and more or less in structure. Dioxys, and that the figure by which Jurine elected to represent his *Trachusa* in the Nouvelle Méthode (Plate 12) is the figure of a *Dioxys*. We do not contend that Jurine had any idea of restricting the Type of Trachusa to the parasitic forms included in it, but by choosing one of these to supply his figure he shows at least that he regarded them as not otherwise than typical.

Stelis, then, becoming a synonym of *Trachusa*, its Type aterrima Pzr. (the only *Stelis* included among the original exponents of Jurine's genus) becomes the Type of *Trachusa* also.

The species maculata F. is a synonym of manicata L. (eited by Latreille in 1810 as the Type of Anthidium F.); bicornis, rufa, cornigera, and fronticornis are all different names for one species, viz. bicornis L.; and fusca is a synonym of Osmia bicolor Schrk. (bicornis L., F., was eited by Latreille as the Type of Osmia Pzr., in 1810).

[TAURUS F. (ined.), associated with *fronticornis* Pzr. in the Erlangen List, 1801, is homonymous with **TAURUS** Storr (1780) *Mamm*.]

DIPHYSIS Lep. (1841)

 $= *T_{RACHUSA}$ (nec Jrn.) Auctt.

Type: Trachusa serratulae Pzr. 86·15 (= pyrenaica Lep.; Lep. 1841).

DIPHYSIS Lep. HN. Ins. Hym. 2. 307–9 sp. 1 (1841)—Type: serratulae Pzr. (= pyrenaica Lep.).

Panzer figured Trachusa serratulae Pzr. in 1805 (Fn. Ins. Germ. **86**·15), and this species having been included in that genus by Jurine, in 1807 (Nouv. Méth. Hym. 253) has been generally regarded as the exponent of Trachusa Jrn., but serratulae was not one of the species included in 1801 and cannot, therefore, be accepted as the Type, and not being congeneric with aterrima Pzr. (the Type of Trachusa) must be excluded from Jurine's genus. Lepeletier erected a new genus Diphysis in 1841 (HN. Ins. Hym. **2**. 307–9 sp. 1) for pyrenaica Lep., which appears to be identical with serratulae Pzr., and the name Diphysis Lep. having been adopted by Thomson, H. Müller, Pérez, etc., should take the place of *Trachusa (nec Jrn.) Auctt. with Type serratulae Pzr.

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III.37. BREMUS Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 37 Bremus—Apes bombinatrices."

[*i. e.* APIS L. Bombinatrices L. Syst. Nat. (ed. 10). 1. 578-9 sp. 29-39 (1758)—terrestris L., etc.]

BREMUS Jrn. (1801)

= BOMBUS Ltr. (IV. 1802).

Type 1: Apis terrestris L. (M. & D. 1915-[Ltr. 1802-10; Crt. 1835]).

BREMUS Jrn. (nn.) = APIS L. "Bombinatrices" L. Syst. Nat. (ed. 10) 1. 578–9 sp. 29–39 (1758)—[eleven species including terrestris L.]. BREMUS Jrn. Erl. Litt-Ztg. 1. 164 no. 37 (30. V. 1801); Pzr. Fn. Ins. Germ. 85·19–21, 86·17–18, 89·16–17 (1801): 90·16–17, 94·12 (1804): Krit. Rev. Ins. Deutsch. 2. 216, 257 (1806); Jrn. Nouv. Méth. Hym. 257–62 [no. 37] Pf. 4·37, 12·37 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 397 (1882). BOMBUS Ltr. HN. Fournis etc. 437 (IV. 1802)—[Type: terrestris L.]: HN. Crust-Ins. 3. 371, 385 (1802): 14. 63–6 no. 422 sp. 1–9 (1804–5): Nouv. Dict. HN. 24. Tbl. Méth. 184, 199 no. 466 (1804)—[Type: terrestris L.]; F. Syst. Piez. pp. xiv, 342–53, no. 67 sp. 1–56, Ind. 5 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 257–63 (1806): Fn. Ins. Germ. 99·17 (1809); Ltr. Gn. Crust-Ins. 4. 180–1 no. 573 (1809): Cons-Gn. Crust-Ins. 341, 439 no. 542 (1810)—[Type: terrestris L.]; Crt-Br. Ent. 12. expl. Pl. 564 (1835)—[Type: terrestris L.]

Type 2: Apis muscorum L. (Wstwd. 1840).

BOMBUS (Ltr.) Wstwd. Syn. Gn. Br. Ins. 86 (1840)-[Type: muscorum L.].

Bremus Jrn. is a new name, proposed in 1801 for a section of Apis, first indicated by Linné in 1758 as Bombinatrices hirsutissimae—this same group was named by

Latreille Bombus, in 1802 (HN. Fourmis etc.), but Jurine's name antedating that of Latreille the latter sinks as a synonym. The Type of Bombus Ltr., designated by Latreille in 1802–10, was terrestris L., F., and this species should be taken also as the Type of Bremus Jrn. Bremus (= Bombus) included parasitic as well as industrious species; the former were removed into a separate genus Psithyrus by Lepeletier—these therefore are no longer to be reckoned under Bremus. Panzer figured eight species in 1805 under the name Bremus and one in 1809 under Bombus—these, with the exception of aestivalis Pzr., are all industrious.

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III.38. MUTILLA (L.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 38 Mutilla-Mutilla."

[*i.e.* MUTILLA L. Syst. Nat. (ed. 10) 1. 343, 582–3 no. 219 sp. 1-8 (1758)—occidentalis L., europaea L., etc.]

MUTILLA L. (1758)

 $= \dagger M UTELLA L. (1758).$

Type 1: Mutilla occidentalis L. (Blmbch. 1779).

MUTILLA L. Syst. Nat. (ed. 10) 1. (†*MUTELLA*) 343, (‡MUTILLA) 582-3 no. 219 sp. 1-8 (1758)—[eight species including l. oecidentalis L., 4. europaea L., 7. acarorum L.]: Fn. Suec. (ed. 2) [43], 427-8 sp. 1727-9 (1761): Syst. Nat. (ed. 12) 1 (2). 539, 966-8 no. 250 sp. 1-10 (1767); F. Syst. Ent. [26], 396-8 no. 123 sp. 1-12 (1775); Müller Zool. Dan. Prod. An. 166 no. 1938 (1776)—[acarorum L.]: Blmbch. HB. Naturges. 1. 386 no. 62 sp. 1 (1779)—[Type: occidentalis L.]; Ltr. Jr. HN. 2. 98-101 (1792); F. Ent. Syst. 2. pp. v, 366-72 no. 163 sp. 1-28 (1796); F. Syst. Piez. pp. xi, 428-39 no. 83 sp. 1-51, Ind. 19-20 (1804).

Type 2: Mutilla europaea L. (Lmk. 1801, Ltr. 1810, Crt., Wstwd.).

MUTILLA L. Syst. Nat. (ed. 10) 1. 343, 582–3 no. 219 sp. 1–8 (1758)—[europaea L., etc.]; Pzr. Fn. Ins. Germ. 46·18–20 (1797): 55·24 (1798): 62·19–20 (1799): 76·20, 80·22 (1800): 83·20 (1801): 97·20, 106·21 (1809); Lmk. Syst. An. sans Vert. 268 no. 125 (I. 1801)—[Type: europaea L., F.]; Jrn. Erl. Litt-Ztg. 1. 164 no. 38 (V. 1801); Ltr. HN. Crust-Ins. 3. 351 (1802): 13. 262–6 no. 370 sp. 1–6 (1804–5): Nouv. Dict. HN. 15. 297–8 (1803): 24. Tbl. Méth. 179 no. 414 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 211–13 (1806); Jrn. Nouv. Méth. Hym. 263–8 no. 38 Pf. 5·38, 12·38, 13·7 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 392 (1882); Ltr. Gn. Crust-Ins. 4. 120–1 no. 524 (1809): Cons-Gen. Crust-Ins. 314, 437 no. 450 (1810)—[Type: europaea L.]; Crt. Br. Ent. 2. expl. Pl. 77 (1825)—[Type: europaea L.]; Wstwd. Syn. Gn. Br. Ins. 83 (1840)—[Type: europaea L.].

The genus *Mutilla*, which originated with Linné in 1758, contained eight species including occidentalis L., europaea L., and *acarorum* L.

In 1779 Blumenbach cited **occidentalis** L. as the typical exponent of Mutilla, while Lamarck (1801) designated **europaea** L. as the Type, and was followed by Latreille (1802–10), Curtis (1825) and Westwood (1840).

It should be noted that Müller [Zool. Dansk. Prod. An. 166 no. 1938 (1776)], in a merely local list of a limited fauna, mentions one species only as a *Mutilla*, viz. acarorum L., but this, even if it were the citation of a Type, could not be maintained, for acarorum (a *Pezomachus*) was only doubtfully included in *Mutilla* by Linné: ("*Haec differt* a reliquis quod glabra nec tomentosa sit, & videtur potius Sphex aptera esse").

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III.39. FORMICA (L.) Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 39 Formica-Formica."

[*i.e.* FORMICA L. Syst. Nat. (ed. 10) 1. 343, 579-82 no. 218 sp. 1-17 (1758)—rufa L., *fusca* L. etc.]

FORMICA L. (1758)

Type 1: Formica rufa L. (Lmk. 1801; Crt. 1839).

FORMICA L. [Fn. Suec. (ed. 1) 305-6 sp. 1019-23 (1746) MN.]: Syst. Nat. (ed. 10) 1. 343, 579-82 no. 218 sp. 1-17 (1758)—[seventeen species including 2 rufa L., 3 fusca L.]: Fn. Suec. (ed. 2) [43], 426-7 sp. 1720-6 (1761): Syst. Nat. (ed. 12) 1 (2).539 no. 249, 966-8 no. 250 sp. 1-10 (1767); F. Syst. Ent. [26], 391-6 no. 122 sp. 1-27 (1775); Blmbch. HB. Naturges. 1. 385-6 no. 61 sp. 1-5 (1779)— [rufa L., etc.]: F. Ent. Syst. 2. pp. v, 349-65 no. 161 sp. 1-60 (1793): Sppl. 279-81 (1798); Ltr. Préc. Car. Ins. 120-1 no. 22 (1796): Pzr. Fn. Ins. Germ. $54\cdot1-2$ (1798): Lmk. Syst. An. sans Vert. 268 no. 124 (I. 1801)—[Type: rufa L.]; Jrn. Erl. Litt-Ztg. 1. 164 no. 39 (V. 1801); Ltr. HN. Fourmis etc. 88-296 (1V. 1802): HN. Crust-Ins. 3. 353-7 (1802): 13. 254-6 no. 362 sp. 1-8 (1804-5): Nouv. Dict. HN. 9. 20-37 (1803): 24. Tbl. Méth. 178 no. 406 (1804): F. Syst. Piez. pp. xi, 395-414 no. 77 sp. 1-75, Ind. 12-14 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 11, 214-6 (1806); Jrn. Nouv. Méth. Hym. 269-73 no. 39 Pf. 5'39, 12'39 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882): Ltr. Gn. Crust-Ins. 4. 125-6 no. 528 (1809): Cons-Gen. Crust-Ins. 311, 437 no. 441 (1810)—[herculanea L., rufa L.]; Crt. Br. Ent. 16. expl. Pl. 752 (1839)—[Type: rufa L.].

Type 2: Formica fusca L. (Wstwd. 1840).

FORMICA (L.) Wstwd. Syn. Gn. Br. Ins. 83 (1840)-[Type: fusca L.].

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III:40. CYNIPS (L.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 40 Cynips—Cynips. Ophion cultellator."

[*i.e.* CYNIPS L. Syst. Nat. (ed. **10**) **1**. 343, 553-5 no. 213 sp. 1-14 (1758)-quercus-folii L., etc.]

CYNIPS L. (1758)

Type 1: Cynips quercus-folii L. (Lmk. 1801; Wstwd. 1840).

CYNIPS L. Syst. Nat. (ed. 10) 1. 343 no. 212, 553-5 no. 213 sp. 1-14 (1758)—[fourteen species including 1. rosae L., 5. quercusfolii L., 13. psenes L.]: Fn. Suec. (ed. 2) [40-1], 385-88 sp. 1518-32 (1761): Syst. Nat. (ed. 12) 1 (2). 539, 917-20 no. 241 sp. 1-19 (1767): F. Syst. Ent. [25], 315-7 no. 104 sp. 1-15 (1775); Blmbch. HB. Naturges. 1. 377 no. 53 sp. 1-3 (1779)—[quercus-folii L., etc.]; F. Ent. Syst. 2. pp. iv, 100-4 no. 137 sp. 1-22 (1793): Sppl. 213-4 (1798); Ltr. Préc. Car. Ins. 108-9 no. 6 (1796); Pzr. Fn. Ins. Germ. 51^{.1} (1798): 74^{.9}, 79^{.7} (1800): 87^{.16}, 88^{.10-13}, 95^{.12} (1804); Lank. Syst. An. sans Vert. 266 no. 121 (I. 1801)—[Type: quercus-folii L., F.]; F. Syst. Piez. pp. vii, 143-8 no. 20 sp. 1-23, Ind. 10^{.11} (1804); Pzr. Krit. Rev. Ins. Deutsch. 92-3 (1806); Jrn. Nouv. Méth. Hym. 284-6 no. 40 Pf. 5^{.4}0, 12^{.4}0 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882); Wstwd. Syn. Gn. Br. Ins. 56 (1840)—[Type: quercus-folii L.].

Type 2: Ichneumon bedeguaris L. (Ltr. 1810).

CYNIPS (L.) Ltr. HN. Crust-Ins. **3**. 312-4 (1802): **13**. 221-5 no. 349 (1804-5): Ltr. Nouv. Dict. HN. **5**. 480-5 (1803): **24**. Tbl. Méth. 175-6 no. 394 (1804): Gn. Crust-Ins. **4**. 28 no. 454 (1809): Cons-Gen. Crust-Ins. 303-4, 436 no. 415 (1810)—[Type: bedeguaris L., F.]

Type 3: Cynips quercus-radicis F. (Crt. 1838).

*CYNIPS (L.) Crt. Br. Ent. 15. expl. Pl. 688 (1838)—[quercusradicis F. is cited as Type; but this was not one of the species included in the genus by Linné.]

[nec *CYNIPS Jrn. Erl. Litt-Ztg. 1. 164 no. 40 (I. 1801)—leucospoides Hochenw. 1785 (= cultellator F., 1793, Jrn.). (IBALIA Ltr. 1802 (= SAGARIS Pzr. 1806)].

Jurine, Erlangen List (1801) does not affect the genus *Cynips* L., for "*cultellator*" was not included in the genus by Linné.

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III. 41. CHELONUS Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 41 Chelonus—Ichneumon oculator."

CHELONUS Jrn. (1801)

Type 1: Ichneumon oculator F. (Jrn. 1801; Crt. 1837). CHELONUS Jrn. Erl. Litt-Ztg. 1. 164 no. 41 (30. V. 1801)—

[Type: oculator F.]; Pzr. Fn. Ins. Germ. 88¹⁴ (1804)—[oculator F.; dentatus Pzr.]: Krit. Rev. Ins. Deutsch. 2. 10, 99–100 (1806); Jrn. Nouv. Méth. Hym. 289–91 no. 41 Pf. 5⁴¹, 12⁴¹ (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 392 (1882); Crt. Br. Ent. 14. expl. Pl. 672 (1837)—[Type: oculator F.]; Vrk. Bull. US. Nat. Mus. 83. 31, 171, 177 (1914)—[Type: oculator F.].

Type 2: Cynips inanita L. (Wstwd. 1840).

*CHELONUS (Jrn.) Wstwd. Syn. Gn. Br. Ins. 63 (1840)-[Type: inanita L.—this species was not included in the genus by Jurine].

Viereck accredits this genus to Panzer (Krit. Rev. 1806), and the designation of its Type to Curtis, but it now appears that *Chelonus* was first published by Jurine as a "monobasic" genus with Type oculator F. in the Erlangen List (1801).

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III.42. CHRYSIS (L.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 42 Chrysis—Chrysis. Ichneumon auratus, semiauratus." [*i. e.* CHRYSIS L. Fn. Suec. (ed. 2) [42], 414-5 sp. 1665-9 (1761)— 1. ignita L., 2. aurata L., etc.]

CHRYSIS L. (1761)

Type: Sphex ignita L. (Blmbch. 1779; Lmk. 1801; Ltr. 1802-10, etc.).

CHRYSIS L. Fn. Suec. (ed. 2) [42], 414-5 sp. 1665-9 (1761)—[five species including ignita L.]: Syst. Nat. (ed. 12) 1 (2). 539, 947-8 no. 246 sp. 1-7 (1767); F. Syst. Ent. [25], 357-9 no. 112 sp. 1-15 (1775); Blmbch. HB. Naturges. 1. 380 no. 58 sp. 1 (1779)—[Type: ignita L.]; F. Ent. Syst. 2. pp. v, 238-43 no. 147 sp. 1-22 (1793): Sppl. 257-8 (1798); Pzr. Fn. Ins. Germ. 5[•]22 (1793): 51[•]51-12 (1798): 77[•]15-16, 79[•]15-16 (1800): 107[•]11-12 (1809); Ltr. Préc. Car. Ins. 126-7 no. 28 (1796); Lmk. Syst. An. sans Vert. 270 no. 129 (I. 1801)—[Type: ignita L.]: 13. 237-9 no. 360 sp. 1-7 (1804-5): Nouv. Dict. HN. 5. 441-2 (1803): 24 Tbl. Méth. 177 no. 405 (1804); F. Syst. Piez. pp. x, 170-6 no. 26 sp. 1-33, Ind. 7-8 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 100-3 (1806); Jrn. Nouv. Méth. Hym. 292-7 no. 42 Pf. 5[•]42, 12[•]42 (1807); F[•]G. K. & K. MT. Schweiz. Ent. Ges. 6. 397 (1882); Ltr. Gn. crust-Ins. 4. 50 no. 479 (1809): Cons-Gen. Crust-Ins. 310, 437 no. 439 (1810)—[Type: ignita L.]; Crt. Br. Ent. 1. expl. Pl. 8 (1824)—[Type: ignita L.]; Crt. Br. Ent. 79 (1840).

[nec *CHRYSIS Jrn. Erl. Litt-Ztg. 1. 164 no. 42 (V. 1801)-auratus L. (OMALUS PZr.); semiauratus L. (CLEPTES Ltr.)].

Neither aurata L., nor semiaurata L., (named as representations of *Chrysis* L. by Jurine in the Erlangen List) belong to that genus as now defined; the first is an *Omalus*

Pzr. (= Elampus Spin.) and the second a Cleptes Ltr. The Type of Chrysis L. is ignita L. as designated by Blumenbach (1779), Lamarck (1801), Latreille (1802–10), Curtis (1824) and Westwood (1840).

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III'43. OMALUS Jrn. Erl. Litt-Ztg. 1. 164. "Gen. 43 Omalus."—[No types—a mere logonym.]

OMALUS Pzr. (1804)

= OMALUS Jrn. (V. 1801) LN.; = ELAMPUS Spin. (1806); †ELLAMPUS Agassiz, Mocs.

Type: Omalus aeneus Pzr. (Pzr. 1804).

OMALUS Pzr. [Jrn. Erl. Litt-Ztg. 1. 164 no. 43 (V. 1801) LN.]; Pzr. Fn. Ins. Germ. 85[.]13 (1804)—[Type: aeneus Pzr.]: 97[.]17 (1806)—[aeneus Pzr. 3 85[.]13 (= mitidus Pzr. \bigcirc 97[.]17)]: Krit. Rev. Ins. Deutsch. 2. 95, 103 (1806). CHRIYSIS L. (4. ELAMPUS Spin.) Spin. Ins. Lig. 1. 10–11 (1806)—[aurata L., aenea Pzr., etc.]. ELLAMPUS Mocs. Mon. Chrysid. 63–113 no. 5. sp. 31–98 (1889). ELLAMPUS Spin. (3. ELLAMPUS Mocs.) Mocs. Mon. Chrysid. 82–107 sp. 59–92 (1889)—[71 aurata L., 76 aenea Pzr.—The latter should be taken as Type].

[nec *OMALUS Jrn. Nouv. Méth. Hym. 300-1 no. 43 Pf. 5.43, 13.43 (1807)—cenopterus Pzr. (Psilus Jrn.) vide no. 63. p. 436].

Omalus in the Erlangen List (1801) is a mere logonym, but Panzer, in 1804 (Fn. Ins. Germ. 85¹3) gave it status in nomenclature by associating it with a definite species Omalus aeneus Pzr. (a Chrysid), and in 1806 (Fn. Ins. Germ. 97²7) added *nitidus* Pzr., which is identified as the φ of *aeneus* Pzr. in Krit. Rev.

In Nouv. Méth. Hym., Jurine characterised his genus, which was evidently that intended by the mere word "Omalus" of the Erlangen List, figuring a species under the name fuscicornis Jrn., and mentioning other species, two of which had been figured and described by Panzer as hemipterus F. (77.14) and cenopterus Pzr. (81.14). Omalus Pzr. (nec Jrn.) has been sunk by all recent authors (Mocsary, R. du Buysson, etc.) as a synonym of Elampus (or Ellampus) Spinola, but it would seem that Omalus Pzr., though based on an error of identification was, notwithstanding, potentially a valid name, and, being older by a year than Elampus, obtained priority.

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III.44. CERAPHRON Jrn. Erl. Litt-Ztg. 1. 165.

"Gen. 44 Ceraphron."-[No types-a mere logonym.]

CERAPHRON Pzr. (1805)

= CERAPHRON Jrn. (V. 1801) LN.

Type: Ceraphron formicarius Pzr. (Pzr. 1805).

CERAPHRON Pzr. [Jrn. Erl. Litt-Ztg. 1. 165 no. 44 (V. 1801) LN]; Pzr. Fn. Ins. Germ. 97.16 (1805)—[Type : formicarius Pzr.]: Krit. Rev. Ins. Deutsch. 2. 135 (1806).

Edward Saunders (Index to Panzer's Fauna Insectorum Germaniae, p. [2]) gives the date of Pzr. "XCVI" as 1805, and "XCVII" as 1809, but since *formicarius* Pzr. 97.16 is quoted by Panzer in Krit. Rev. (1806) this plate should be assumed to have been published in 1805 unless actual evidence to the contrary can be produced. [Heft 96 was published in 1804, before October—*teste* C. D. Sherborn.]*

[nec *CERAPHRON Jrn. [Erl. Litt-Ztg. 1. 165 no. 44 (V. 1801) LN]: Nouv. Méth. Hym. 303-4 no. 44 Pf. 5·44, 13·44, 14·9 (1807)— [1. frontale Ltr. (= cornutus Jrn.); 2. sulcatus Jrn.]; F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 392 (1882)—[frontale Ltr. ♂ (= cornutus Jrn.]; Spinola Ins. Lig. 2 (3). 168 no. 12 sp. 1 (1806)—[Type: sulcatus Jrn.]; Ltr. Gn. Crust-Ins. 4. 35-6 (1809)—[Type: sulcatus Jrn.]: Cons-Gen. Crust-Ins. 306, 436 no. 427 (1810); Crt. Br. Ent. 6. expl. Pl. 249 (1829)—Type: sulcatus Jrn.]; Wstwd. Syn. Gn. Br. Ins. 77 (1840)—[Type: sulcatus Jrn.] (MEGASPILUS. Wstwd.)].

Ceraphron Jrn. of the Erlangen List (1801) was a mere word without description or exponents. In 1805, Panzer associated formicarius Pzr. with Ceraphron which thus obtained a status in nomenclature, and when Jurine in 1807 (Nouv. Méth. Hym.) published his description of Ceraphron with exponents, Ceraphron Pzr. had already obtained a year's priority in association with a different species.

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III.45. LEUCOPSIS (F.) Jrn. Erl. Litt-Ztg. 1. 165.

"Gen. 45 Leucopsis-Leucopsis."

[*i.e.* LEUCOSPIS F. Syst. Ent. [25], 361 no. 114 sp. 1 (1775)-Type: dorsigera F.]

LEUCOSPIS F. (1775)

= †LEUCOPSIS F., Lmk., Jrn.

Type: Leucospis dorsigera F. (F. 1775).

LEUCOSPIS F. Syst. Ent. [25], 361 no. 114 sp. 1 (1775)-[Type: dorsigera F.]: Ent. Syst. 2. pp. v, 245-7 no. 149 sp. 1-3 (1793):

* Mr. Sherborn has very kindly allowed us to collate his notes with our own.

Sppl. 259 (1798): Pzr. Fn. Ins. Germ. 15¹⁷ (1794): 58¹⁵ (1798):
84¹⁷-18 (1801); Ltr. Préc. Car. Ins. 109-10 no. 7 (1796).
LEUCOPSIS Lmk. Syst. An. sans Vert. 267 no. 122 (I. 1801): Jrn. Erl. Litt-Ztg. 1. 165 no. 45 (V. 1801). LEUCOSFIS Ltr. HN. Crust-Ins. 3. 311 (1802): 13. 218-9 no. 347 (1804-5): Nouv. Dict. HN. 13. 111-12 (1803): 24. Tbl. Méth. 175 no. 392 (1804). LEUCOSFIS F. Syst. Piez. 168-70 no. 25 sp. 1-6, Ind. 18 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 100 (1806); Jrn. Nouv. Méth. Hym. 305-7 no. 45, [LEUCOFSIS] Pf. 5⁴5, 13⁴5 (1806); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 392 (1882); Ltr. Cons-Gen. Crust-Ins. 303, 436 no. 412 (1810).

"Leucopsis" of the Erlangen List is probably a mere error, but this spelling also occurs on the Plates of the Nouv. Méth. (not in the text), in Lamarck's Syst. An. sans Vert. (1801) and on p. x of Fabricius' Syst. Piez. (1804), but in Ent. Syst. 2 (the work cited by Jurine) the spelling is Leucospis.

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III.46. CODRUS Jrn. Erl. Litt-Ztg. 1. 165.

"Gen. 46 Codrus."--[No types-a mere logonym.]

CODRUS Pzr. (1801)

= CODRUS Jrn. (V. 1801) LN.

Type: Codrus niger Pzr. (Pzr. 1801).

CODRUS Pzr. [Jrn. Erl. Litt-Ztg. 1. 165 no. 46 (V. 1801) LN.]; Pzr. Fn. Ins. Germ. 85'9 (VII. 1801)—[Type: niger Pzr.]; Jrn. Nouv. Méth. Hym. 308-9 no. 46 Pf. 5'46, 13'46 (1806)—[niger Pzr. and two other species].

Codrus was first published in the Erlangen List (30. V. 1801), but being without description or associated species must be attributed to Panzer, who gave as an exponent niger Pzr., later in the same year (VII. 1801). Jurine described the genus in 1807 including two other species with niger Pzr.

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III.47. CHALCIS (F.) Jrn. Erl. Litt-Ztg. 1. 165.

"Gen. 47 Chalcis—Chalcis. Cynips armata Panzer. pluresque Ichneum. minuti."

[*i.e.* CHALCIS F. Mant. Ins. 1. pp. xv, 272-3 no. 116 sp. 1-7 (1787)—sispes L., etc.]

CHALCIS F. (1787)

= SMIERA (Spin.) Crt.

Type: Sphex sispes L., F. (Lmk. 1801, Ltr. 1802). TRANS. ENT. SOC. LOND. 1914.—PARTS III, IV. (FEB.) FF 436 Morice and Durrant on "Jurinean" Hymenoptera.

CHALCIS F. Mant. Ins. 1. pp. xv no. 115, 272–3 no. 116 sp. 1–7 [1787)—[1. sispes L., and six other species]: Ent. Syst. 2. pp. v, 194–8 no. 142 sp. 1–11 (1793): Sppl. 242–3 (1798); Pzr. Fn. Ins. Germ. 32.6 (1796): 76.14, 77.11, 78.15–16, 84.16 (1801): 88.15 (1804); Lmk. Syst. An. sans Vert. 266 no. 120 (I. 1801)—[Type: sispes L.]; Jrn. Erl. Litt-Ztg. 1. 165 no. 47 (V. 1801); Ltr. HN. Crust-Ins. 3. 311–12 (1802)—[Type: sispes L., F.]: 13. 219–21 no. 348 sp. 1–6 (1804–5): Nouv. Dict. HN. 4. 572–3 (1803): 24. Tbl. Méth. 175 no. 393 (1804); F. Syst. Piez. pp. x, 159–67 no. 24 sp. 1–33, Ind. 7 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 92, 93, 95, 97–9 (1806); Jrn. Nouv. Méth. Hym. 312–16 no. 47 Pf. 5.47, 13.47 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 392 (1882); Ltr. Gn. Crust-Ins. 4. 25–7 no. 452 (1809): Cons-Gen. Crust-Ins. 303, 436 no. 413 (1810). *SMIERA* (Spin.) Crt. Br. Ent. 10. expl. Pl. 472 (1833). CHALCIS Wstwd. Syn Gn. Br. Ins. 65 (1840).

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III·48. PSILUS Jrn. Erl. Litt-Ztg. 1. 165. "Gen. 48 Psilus—Tiphia cenoptera Panzer."

PSILUS Jrn. (1801)

= *OMALUS Jrn. (1801 LN.; 1807); = *BETHYLUS [nec ltr.] Wstwd.

Type: Tiphia cenoptera Pzr. (Jin. 1801).

PSILUS Jrn. Erl. Litt-Ztg. 1. 165 no. 48 (30. V. 1801)—[Type: cenoptera Pzr.]. *OMALUS Jrn. [Erl. Litt-Ztg. 1. 164 no. 43 (30. V. 1801) LN.]: Nouv. Méth. Hym. 300-1 no. 43 Pf. 5'43, 13'43 (1807)—[cenoptera Pzr., and two other species]; F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 392 (1882). *BETHYLUS (nec Ltr.) Wstwd. Syn. Gn. Br. Ins. 76 (1840)—[Type: cenoptera Pzr.].

[nec *PSILUS Pzr. Fn. Ins. Germ. 83.11 (1801)—[cornutus Pzr.]: Krit. Rev. Ins. Deutsch. 2. 93 (1806)—[cornutus Pzr.]; Jrn. Nouv. Méth. Hym. 317-19 no. 48 Pf. 5.48, 13.48 (1807)—[cornutus Pzr., and three other species]—cornutus Pzr. (SPARASION Ltr.)].

Psilus of the Erlangen List (1801) had as Type Tiphia cenoptera Pzr., which was referred to the genus Ceraphron (Jrn.) Pzr., by Panzer in 1806, while the Psilus of Panzer (1801) included only a single species Psilus cornutus Pzr. (†cornatus Pzr.) now placed in the genus Sparasion Ltr. Westwood, in 1840, cited Tiphia cenoptera Pzr. as the Type of Bethylus Ltr., but Bethylus Ltr. (1802) was a monotypical genus founded on Tiphia hemiptera F.